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Medical College of Georgia.

"Je prends le bien où je le trouve."

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ARTICLE VIII.

On the use of Alcoholic Stimulants as articles of Diet and Medicine. By F. M. Robertson, M. D., of Charleston, S. C.

Before entering into the consideration of the nutritive and medicinal properties of alcoholic stimulants, it will be proper to define the difference between articles of food, properly speaking, and medicines. The reasons for drawing this distinction will become apparent as we proceed in the investigation of our subject.

Aliment, or food, is composed of such substances as, when taken into the system, contribute to the development and growth of the corporeal structure, or living tissues; that is to say, the substances that contain the elements that enter into the composition of the bones, muscles, nerves, bloodvessels, tendons, and other organs, of which the entire body is composed. A continual supply of these nourishing substances is necessary to make up the deficiency in the tissues and organs, occasioned by the ordinary waste from secretion, absorption, and the wear and tear of time, mental effort, bodily exertion, and exposure to the various influences, adverse to health and vigor, with which we are surrounded.

Under the head of Medicines, we comprehend all those substances used for the prevention and cure of such diseases as the human frame is liable to, either functional or structural. They are derived from the three great kingdoms of nature—the
animal, the vegetable and the mineral; and their chemical composition is as varied as the sources from which they are derived. Some of them are innocent in their nature, but a large number possess the most active, acrid, and poisonous properties, and when improperly administered to the healthy subject, soon produce derangement of function, structural disorganization, and death. When used, however, in judicious hands, for the cure and alleviation of those "ills to which flesh is heir," they become truly valuable instruments of good, and vindicate the wisdom and benevolence of the great Creator in endowing finite beings with the power of using them for the relief and cure of those maladies that often render this life miserable.

Organic Chemistry—as the application of this beautiful science, to the investigation of the proximate or elementary constituents of animal and vegetable substances, has been called—has thrown a flood of light upon the composition of those articles that constitute the largest amount of those elements essential to vitality and nourishment: that is, the pure pabulum vitae.

If time would permit, it would be interesting to examine the process, by which the food is rendered in a fit condition to be introduced into the circulation; but, as we do not desire to extend this article beyond what is reasonable, we must pass over that truly wonderful process.

"The supply of the primary organic substance for this incessant renewal and building up of the organized structure and maintenance of organic forms, is derived from the blood. This fluid, in its natural state, is a concentrated solution of all the solids and products of the animal economy. The amount of azotised or albuminous compound matter destroyed in twenty-four hours by life, or organic action, may be taken, on an average, at two or three ounces."—(Dumas' Chimie Physiologique et Medicale, p. 463.) The blood would rapidly become impoverished and unfitted for the purposes of life, unless its losses in albumen and its organic derivatives were constantly restored.

The renewal of the organizable or plastic material of the blood, and its maintenance in its normal composition, for structural formation, is one of the offices of our food. Repeated analyses
have demonstrated that, of the aliment that is adapted to healthy nutrition, one-eighth part only consists of albumen, or its protein compounds, or their derivative compounds; and whatever is devoid of these substances—that is the chemical combination of carbon, hydrogen, nitrogen, and oxygen, in the proportion to constitute protein \((C_{4\text{,}0}\cdot H_{3\text{,}0}\cdot N_{5}\cdot O_{1\text{,}2})\) or albuminous compounds—cannot perform the offices of food, or be fitted for nutrition.” — (Jackson on Tea and Coffee. American Journ. Med. Sci., vol. xviii., new series, p. 80.)

The supply of the plastic materials necessary to the building up of the tissues is not the only condition requisite to vitality and life-action. An uniform and definite temperature, which in man and animals is from 98° to 100° of Fahrenheit, is also essential to a rigorous and healthy action of the organization. For this, nature has made ample provision, by causing it to be abundantly disengaged by the chemical combination of certain elements in the system. “The mutual action between the elements of the food and the oxygen conveyed by the circulation of the blood to every part of the body is the source of animal heat. All living creatures, whose existence depends on the absorption of oxygen, possess within themselves a source of heat independent of surrounding objects. The high temperature of the animal body, or, as it may be called, disengagement of heat, is uniformly and under all circumstances the result of the combination of a combustible substance with oxygen. In whatever way carbon may combine with oxygen, the act of combination cannot take place without the disengagement of heat. It is a matter of indifference, whether the combination takes place rapidly or slowly, at a high or a low temperature; the amount of heat liberated is a constant quantity.” — (Liebig’s Animal Chemistry, p. 15.)

The carbon and hydrogen which are essential, by their combination with oxygen, to the production of animal heat, are introduced into the circulation through the food, and, consequently, the blood furnishes both these essential elements to nutritive and life-action.

“The carbon and hydrogen oxidized in the blood,” observes Dr. Jackson, “and in this manner generating animal heat, are obtained from the food: Nature has made most ample provision for the supplies of these chemical elements, by constituting
them a large portion of the food of animals. Not less than from six-sevenths to seven-eighths of the alimentary substances of animals consist of non-azotized bodies. Fatty, starchy, and saccharine matters, are of this character; they are not adapted to or intended for nutrition, but solely for the purpose of calorification, by their combustion and combination with oxygen introduced into the blood by the process of respiration. This proposition is demonstrated in the composition of the alimentary portion of milk. The casein or plastic matter for nutrition averages 13 per cent., the calorifacient, or the cream and sugar of milk 87 per cent. — (Amer. Jour. Med. Sciences, vol. xviii., new series, p. 81.)

It is from these revelations of organic chemistry, that we arrive at a precise and accurate knowledge of the nature of food; its uses in the economy, and its manner of operating. We can pronounce with positive certainty as to what substances do, or do not, constitute appropriate nourishment for the system, and accurately ascertain the proportionate value of each article of diet.

From these facts, we also perceive that alimentary substances, or articles of food, are divided into two distinct classes, differing from each other essentially in nature, composition, and mode of action. Under the first division are found the albuminous compounds, which, according to the analysis of Liebig, have nearly the same chemical composition as the tissues themselves, and are identical with some of them, and, hence are specially appropriated to nutrition and repairing the waste in the solid structures. "No substance in which this especial chemical composition, protein and its compounds, do not exist, can belong to this class, or can be employed in the economy for its nutrition." — (Jackson on Tea and Coffee. Amer. Jour. Med. Sci., vol. xviii., new series, p. 82.) Under the second head we find those articles of aliment comprehended in those chemical compounds, called hydro-carbons, that are capable of prompt decomposition into carbon and hydrogen in the blood. "No other organic substances," says Dr. Jackson, "though rich in carbon and hydrogen, are capable of entering into this division of aliments."

We shall now pass to the chemical composition of Alcohol,
and then examine its claims to be ranked among the nutritive and life supporting substances. In this examination it shall have a fair hearing, nor shall “aught be set down in malice.” We shall place it in such a position, and such only, as can be sustained by scientific facts, well established, from acknowledged authority.

Turner, than whom there can be no better chemical authority, calls alcohol a *hydrate of oxide of ethyle*, represented by the formula $C_4H_6O\cdot H.O$. “This compound,” he observes, “is formed when ether, which is the *oxide of ethyle*, and water meet in a nascent state, as we shall see occurs when some of the acrid salts of ethyle are heated, or otherwise decomposed. But, practically, it is produced entirely from sugar by fermentation. The juice of the grape, or any other saccharine juice, or an infusion of malt, when exposed to the air for a short time, and these, from a temperature of from $40^\circ$ to $85^\circ$, soon enter into fermentation, and a large quantity of carbonic acid is given off, while the sugar totally disappears, and alcohol is found in its place.”

“Alcohol,” observes Wood & Bache, “being the product of the vinous fermentation, necessarily exists in all vinous liquids, and may be obtained from them by distillation. Formerly it was supposed, that these liquors did not contain alcohol, but were merely capable of furnishing it in consequence of a new arrangement of their ultimate constituents, the result of the heat applied. Brand, however, disproved this idea, by showing that alcohol may be obtained from all vinous liquors without the application of heat, and therefore must pre-exist in them. “His method consists in precipitating their acid and coloring matter by sub-acetate of lead, and separating the water by carbonate of potassa. Guy, Lussac, and Donovan have proved the same fact.” Alcohol, then, is the active principle of all distilled and fermented liquors—whether we call them brandy, gin, whiskey, rum, champaign, hock, madeira, sherry, port, porter, ale, beer, cider, &c.; without the alcohol which they contain they would be considered utterly worthless, even as beverages, by those who place so high a value on them. Their different qualities are due to the different materials from which they are derived. These are often imitated in the manufacture of spurious liquors
Robertson, on Alcoholic Stimulants. [April,

and wines, and if it were necessary we could present an astounding array of the disgusting compounds that are vended and consumed, under the euphonious brands which are placed upon them by the unscrupulous manufacturer.

We are now prepared to estimate the value of alcoholic stimulants as articles of diet. Unfortunately a large number of those who use distilled and fermented liquors, do so under the impression that they impart healthful nourishment and increased energy to the system. By the chemical analysis which we have given, it will be seen that all articles of food must contain two chemical compounds—one, to build up the muscular and other tissues, containing an abundance of the albuminous compounds—the other, containing hydro-carbons, readily decomposed in the circulation, to impart warmth to the entire system. Upon examining the chemical composition of alcohol, we find it entirely destitute of the protein compounds essential to nourishment, and consequently utterly unfit for the purposes of nutrition. This is a settled point, beyond all dispute or doubt: it exhibits no traces of those elements essential to the nourishment and growth of the animal tissues, and consequently is utterly unfit for such purposes. Nay, more; we shall show, by-and-by, it is positively injurious to the tissues, and even its moderate use is incompatible with sound health, and a normal condition of the tissues themselves. This position is borne out by the facts disclosed by chemical analysis, and must stand as a scientific truth until overthrown by new observations in this department of knowledge.

Although alcohol possesses carbon and hydrogen, yet they are not in such proportions as to render them available, except temporarily, under certain conditions of the system, as heat evolving substances. In his enumeration of the articles fitted for this process, Liebig ranks wine and spirits as the very lowest; and when we remember that there are numerous other substances in nature admirably adapted to this important end, and that alcohol as an irritant poison would counteract any beneficial effects as a heat generating substance, we shall not hesitate in rejecting it from the list of appropriate aliments. Moreover, in order to be ranked as one of the "elements of respiration," as Liebig terms these articles of food, it should be
readily and promptly decomposed, in the circulation, into carbon and hydrogen. This, however, is not the case with alcoholic stimulants, and this statement is sustained by a strong array of scientific testimony. That alcohol is absorbed and conveyed into the most remote parts of the system, in an unaltered condition, has been abundantly established; and, that too, upon the very best authority. If it is readily decomposed in the circulation, how is it that the expired air from the lungs of even the temperate drinker is redolent with the vapor of alcohol; and who that has received in his face the expired air from the lungs of the confirmed drunkard, can forget the loathsome and sickening combination of the fumes of alcohol and that cadavrous odor, the mere thought of which is sufficient to inspire disgust.

"That alcohol becomes absorbed is proved by the fact, that it has been found in the blood, the breath, the fluid of the serous membranes, the brain, the liver, the bile and the other secretions. Teidemann and Gmelin recognized the odor of it in the blood of the splenic vein, though they were unable to detect it in the chyle. A similar observation is recorded by Magendie. Dr. Percy* also found it in the blood of the animals to whom he had administered it. He likewise detected it in the bile, and other secretions. Moreover, the recognition of the odor of alcoholic liquors in the breath of individuals who have swallowed them, as well as their detection by their smell in the fluid contained in the ventricles of the brain, the pericardium, &c., prove indisputably that alcohol becomes absorbed. Dr. Cook (Treatise on Nervous Diseases, i., 222. London, 1820) states, on the authority of Sir A. Carlisle, that, in one case, the fluid of the ventricles of the brain had the smell, taste, and inflammability of gin. Dr. Christison has questioned the correctness of this observation, on the ground that gin, of sufficient strength to take fire, could not enter the blood-vessels without coagulating the blood. But the objection appears to me to be groundless; for I find that a small quantity of undiluted commercial gin may be aeded to white of egg without causing either coagulation or the slightest opacity. Dr. Ogston (Edinburgh Med. and Surg.

* An Experimental Inquiry concerning the presence of Alcohol in the ventricles of the brain, after poisoning with that liquid, together with experiments illustrative of the physiological action of alcohol. London, 1839.
Journal, vol. xi.) has confirmed the testimony of Carlisle, and states, that in one case he found about four ounces of fluid in the ventricles, having all the physical qualities of alcohol. Dr. Percy (op. supra cit.) has recently set the question at rest, and satisfactorily proved the accuracy of the above statements, by his experiments on animals. He appears to think that some peculiar affinity exists between the substance of the brain and the spirit; more especially as, after analyzing a much larger quantity of blood than can possibly exist in the cranium, he could generally obtain much more alcohol from the brain than from this quantity of blood. He was unable to determine whether or not the fluid of the ventricles contained any alcohol. Dr. Percy also detected alcohol in the liver, and has endeavored to connect this fact with the frequent occurrence of hepatic diseases in drunkards."—(Pereira's Materia Medica and Therapeutics, vol. i., p. 328. Philadelphia, 1846.)

Unless it is decomposed promptly, and in sufficient quantities, that, by the combination of its carbon and hydrogen with oxygen, heat may be produced, it must be unfit for the purpose of maintaining the animal temperature, and will float through the system as an irritating poison, perverting and impeding the due performance of those functions essential to health and life. In fact, alcohol prevents or retards the performance of those chemical actions in the animal economy, which are absolutely necessary to the elimination and ejection of substances, from the organization unfriendly to life. Of this assertion, we have abundant proof, both chemical and physiological. "The ingestion of alcohol, so far from promoting, checks the oxygenating process; and was long since shown by the results of the experiments of Dr. Prout, who invariably found the quantity of exhaled carbonic acid to exhibit a marked decrease after the ingestion of alcoholic drinks, other circumstances remaining the same. Subsequent experimenters upon the respiratory process have met with the same results, and they are confirmed by the facts ascertained by Bouchardat, that where alcohol is introduced into the system in excess, the blood in the arteries presents the aspect of venous blood, showing that it has not undergone the proper eliminating process. Now, although we may not understand the reason of this, (although it seems to be
referable to the well known power of alcohol to prevent or retard chemical changes in organic substances,) the fact is of the utmost importance." (British and Foreign Medical Review, Amer. Ed., 1 vol., No. vi., p. 526. Philadelphia, Oct. 1847.)

The chemical combination of the oxygen, taken into the circulation through the lungs, with the carbon and hydrogen, introduced into the same channel by means of the digestive organs, produces and maintains the temperature of the body; and if this combination or combustion does not take place properly, there will be a corresponding decrease of temperature or animal heat; and substances will be retained in the system, which are positively injurious to the tissues.

Upon a careful review of what has been said upon the composition of articles entering into the second class of alimentary substances, and the chemical unfitness of alcohol to be ranked in this class, we must at once be convinced of the impropriety and unreasonableness of resorting to the use of alcoholic stimulants for the purpose of warding off the effects of intense cold. It would be suicidal, as a dependence upon these articles, to the neglect of others, which are rich in the heat generating elements, would be fatal to the desired object, and thus, under the influence of this common delusion, men often become their own destroyers. Although the warmest advocate of alcohol, as a heat imparting substance in winter, and a cooling beverage in summer, cannot give a shadow of a reason why it possesses such opposite properties, yet the chemical laws, which have been brought forward, will show, beyond dispute, that it performs neither office. In winter it fails, from its very nature and composition, to impart the elements of heat to the body; and, in summer, its property of retarding those chemical actions essential to the elimination, and removal from the circulation and different organs, substances that are positively injurious, lays the foundation for a train of diseases that have hurried thousands to untimely graves.

Although the Russians, and most of the Northern nations, are great consumers of alcoholic stimulants, yet they never would be able to withstand the intense degree of cold, to which they are exposed, but for the fact that their accustomed diet abounds in those substances that are rich in the hydro-carbons.
They use an abundance of animal food and oily substances, while the inhabitants of the tropical regions confine themselves mostly to vegetables, fruits, and other light substances. When we come to understand the chemical process by which the animal temperature is maintained, we are no longer surprised and incredulous upon being informed that the Esquimaux and Greenlander will feast, with the most perfect gusto, upon enormous quantities of train oil, rancid lard, tallow candles, slush, and the most offensive articles of this class. These are all rich in the hydro-carbons, and are readily decomposed in the system, imparting an abundance of carbon and hydrogen, which, meeting with the oxygen from the inspired air, combine with it, and maintain a temperature in the body, which enables it to withstand a cold of more than 40° below zero.

In connection with this branch of the subject, we will mention one fact in relation to the temperature of the body in individuals suffering from delirium tremens. In most cases of this horrible disease, the attack is preceded by a protracted and excessive indulgence in ardent spirits, and other forms of alcoholic stimulants, and, usually, an entire abstinence from all articles of ordinary food—arising, either from a want of appetite or an inability in the stomach to retain them when taken. In the second, and more particularly in the third stage of this affection, there is a cold and clammy condition of the entire surface, and even the tongue partakes of this unnatural chilliness. In truth, to the touch, it is as chilling and repulsive as the dewy coldness of a corpse itself. It will generally be found, that the usual warmth of surface does not return until the stomach becomes tranquil, and some solid and substantial nourishment has been taken into the system.

The fact, that alcohol is absorbed and circulated through the system in an unchanged condition, affords a ready explanation of this phenomenon. It is incapable of maintaining the animal heat, and the more appropriate heat producing, or combustible articles of food having been refused or rejected by the stomach, decrease of temperature and coldness of the surface are the inevitable results; for the excess of alcohol, in the system, will retard or prevent the decomposition of the fatty matters of the organization, which are used up for the purpose of maintaining
the animal temperature, under circumstances in which the heat-producing articles of diet are withheld from the circulation.

To show that alcoholic stimulants cannot be relied on to enable the system to resist the influence of extreme cold, we shall refer to a few examples of unquestioned authority.

It is a well-known fact, that numerous ships from our own ports, as well as those of other nations, sail under the "temperance flag;" they furnish no spirits, nor will some of them ship a man that is not a pledged teetotaler. In lieu of these, coffee and other articles of wholesome diet are allowed, which, certainly, while they add to the comfort of the seaman, exert no influence in leading him to habits of vice and dissipation. And the combined testimony of all, from the equator to the poles, establishes the fact that the crews of such ships withstand the unfriendly influences of extreme heat and pinching cold, better than those who are allowed to indulge in spirituous beverages.

The following is the testimony of an able English writer in the British and Foreign Medical Review: "The testimony of those who are exposed to vicissitudes of climate is perhaps even more valuable than that of those who have to sustain continued heat or cold; and under this aspect we regard the evidence of intelligent seamen as of peculiar importance, in addition to the force it derives from the well-known attachment of this class to spirituous liquors. That such regard to the total abstinence principle is at any rate a safe one, may be inferred from the circumstance that it is now carried into practice in a very considerable part of the merchant service in this country, and in a still larger proportion of American vessels; and that the adoption of this plan is not known to occasion any difficulty in obtaining crews for the 'temperance ships,' when a fair compensation is made in the superior quality of the provisions and allowances, or in the rate of wages, as an equivalent for the 'stoppage of grog;' in fact, such ships are often in positive request. And it is not a little worthy of note, that lower rates of insurance are frequently taken upon 'temperance ships,' than upon those upon whom the usual allowance of spirits is continued; it being well known that a large proportion of losses at sea are due to the intemperance of officers and men."

Dr. Joseph Dalton Hooker, a distinguished medical officer,
attached to one of the late English Antartic expeditions, in answer to a question, whether the abstinence from spirits in cold climates is attended with positive benefit, writes: “I do think that the use of spirits in cold weather is generally prejudicial. I speak from my own experience. It is very pleasant. The glass of grog warms the throat, the mouth, and the abdomen; and this, when one is wet and cold, with no fire, and just before turning into damp blankets, is very enticing, but it never did me one atom of good; the extremities are not warmed by it; and when a continuance of exertion or endurance is called for, the spirit does harm, for then you are colder and more fatigued a quarter or half hour after it than you would have been without it. Some of the men on board our ship, and among them some of the best, never touched grog during one or more of the Antarctic cruises: they were not an whit the worse for their abstinence, but enjoyed the same perfect health that all the crew did throughout the four years’ voyage. Many of our men laid in large stocks of coffee, and when practicable had it made for them after the watch on deck.”—(British and Foreign Med. Rev., Oct. 1847, p. 533.)

We shall close this branch of the subject by offering a few examples, to illustrate the fact that alcoholic stimulants act injuriously on the system, in warm climates, by interfering with those chemical actions essential to the elimination, and removal from, the animal economy, of substances injurious to the system; and which cannot be retained with safety to health or life. Those who will take the trouble to examine the reports of the British Medical officers in the East and West India service, will see what a fearful mortality is caused by the use of alcoholic stimulants as an ordinary allowance. Also the great decrease in mortality and improvement in the condition of the troops serving in these pestilential regions since the organization of temperance societies in the various regiments. “The return drawn up by the Inspector-General for the first six months of 1838,” observes Dr. Forbes, “show that the average daily percentage of sick belonging to the temperance society, (about one-third of the whole strength,) was only 3 2/3, while the daily percentage among the remainder was 10 1/2. Even this result does not give the most favorable view of the case; for
many men joined the temperance society, whose constitutions had been ruined by previous dissipation, and several such were habitual tenants of the hospital until invalided. Since that time the total abstinence principle has been introduced among Europeans, in India and other tropical countries: and, we are assured, with the most favorable results. There has been no want of satisfactory medical testimony in its favour. Indeed, all our best writers on tropical diseases are explicit on this point. And we may here give the evidence recently given by Mr. Gardner, now superintendent of the Botanic gardens in Ceylon, a well educated surgeon, who spent several years of most active exertion in Brazil, and who penetrated into the country farther than any other scientific European. During three years' travelling in that climate, under constant fatigue and exposure to vicissitudes of weather and irregularity of living, his only beverage, besides water, was tea, of which he had laid in a large stock previously to his departure from Pernambuco. He was told, when he arrived in Brazil, that he would find it necessary to mix either wine or brandy with the water which he drank; but a very short experience told him, not only that they are unnecessary, but that they are decidedly hurtful to those whose occupations lead them much into the sun. "Whoever drinks stimulating liquors," he says, "and travels day after day in the sun, will certainly suffer from headache; and in countries where miasma prevail, he will be far more likely to be attacked by diseases which are there endemic."

In confirmation of these views, we would refer to another authentic fact of recent date. Lieut. Lynch, of the U. S. N., makes the following remarks in relation to the organization and results of the expedition to the Dead Sea, in which the effects of total abstinence, under the most trying exposure to heat, privation and fatigue, were fairly tried and triumphantly vindicated. In organizing the expedition," he remarks, "I was very particular in selecting young, muscular, native-born Americans, of sober habits, from each of whom I exacted a pledge to abstain from all intoxicating drinks. To this stipulation, under Providence, is principally to be ascribed their final recovery from the extreme prostration consequent on the severe privations and great exposure to which they were unavoidably

The almost universal apology given by those who advocate the use of alcoholic and other stimulants in warm climates is, that they increase the appetite, and invigorate the powers of the digestive organs, at a time when the relaxing and debilitating effects of high temperature are most felt by the system. Upon this point, Liebig justly remarks, "the residents of warm climates, who take stimulants before their meals, in order to make up for the deficiency of appetite, act upon a most unphysiological and ultimately injurious system; forgetting, or being ignorant, that the real demand for food is much less when the surrounding temperature is high, and that the diminished appetite really indicates the diminished wants of the system. In a large proportion of cases in which the habitual employment of fermented (and other) liquors has really a show of utility, we are quite certain that a copious use of cold water externally, and the substitution of it for more stimulating beverages, will be found in the end to be the most wholesome practice, tending (as large experience has shown that it does) both to improve the appetite and invigorate the digestive powers."—(Brit. and For. Med. Rev., Oct. 1847, p. 529.)

In a future number we shall discuss the Medicinal properties and uses of Alcoholic Stimulants.

ARTICLE IX.

The Improper Use of Poultries in Ophthalmia. By C. T. Quintard, M. D., of Roswell, Geo.

While an assistant physician to the Bellevue Hospital, N. Y., my attention was frequently directed to the mal-application of remedies in the treatment of Ophthalmitis. The eye and its diseases, have received the attention of so many eminent practitioners, from the days of Avicenna, to the present, that the treatment, it would seem, should be tolerably well understood; but like other diseases, those of the eye have been subjects of speculation and experiment, from which empirical practice has resulted. The eye is an organ, so delicate in its structure, as
not to admit of an uncertain practice in the treatment of its diseases; and yet practitioners, who have not an opportunity of investigating the subject by actual observation, do, in a majority of cases, apply cataplasms, lotions, and unguents, which increase the existing evil. It is not my intention to enter into an analysis of the modes adopted to remove the various diseases of the eye, or even to mention the forms of morbid action to which the organ is subject, I wish simply to notice, a mode of treatment which ends often in the destruction of the eye, and which we have reason to fear is too prevalent. The symptoms of conjunctival ophthalmia have been so accurately described by Beer, Fetch, Travers, Lawrence, and a host of writers, that it is unnecessary to point them out. Beer classifies ophthalmia, according to the situations in which the inflammation first originates. He divides it into three forms, viz: inflammation of the eyelids or blepharophthalmitis; inflammation of the parts between the orbit and globe of the eye; and lastly, inflammation of the eyeball itself, or ophthalmitis. It is not to be understood, as he remarks, that the extent of an idiopathic inflammation of the eye is so considerable as to embrace all the parts indicated by his division, for it is mostly restricted to particular textures. By neglect, or injudicious treatment, the inflammation spreads, until it may forever deprive the patient of vision. There is, according to Scarpa, a period in every case of ophthalmia, in which the active disturbance ceases, and is followed by a certain degree of chronic ophthalmia. It follows, therefore, if the teachings of Scarpa and Richter be true, that with this altered action, there should be a different treatment instituted, i.e. in place of emollient relaxing applications, there should be substituted those that partake of an astringent, corrobant quality, as the former only serve to keep up the turgescence of the vessels and the redness of the conjunctiva.

"Quo major autem fuit inflammatio vis vehementia, says Richter,—eo major plerumque sequitur partium affectarum atonia, eoque major opus est adstringentium et roborantium longo usu, ut auserantur penitus reliquiae morbi," &c. It is at the period when the change from an acute to the chronic state takes place in the inflammation, that the evils of improper practice result.

Some time since, I met with a paper by Dr. Dubois, Sur-
geon to the New York Eye and Ear Infirmary, on the impropriety of applying warm poultries to inflamed eyes. After giving the opinion of a number of distinguished surgeons on the subject, he states that his experience fully agrees with that of the gentlemen whose opinions he quotes. Poultices, though for a time they may relieve pain, are generally prejudicial, and seldom, if ever, so happy in their effects as applications from which less danger is to be apprehended. Passing for an "old woman's remedy," which is thought "can do no harm even if it do no good," the poultice is applied, and while the pain is diminished, the eye is destroyed. It is admitted, by the most eminent ophthalmic surgeons, that the good effects to be derived from them may be derived from other means. We conclude, therefore, that it is generally safer to try other remedies, before we subject a patient to treatment of such doubtful propriety. I select the two following cases, from those which have fallen under my observation, to illustrate.

R. McC. came under my care with the lids of the right eye very much swollen and inflamed; the cornea bulging between the lids, with a very copious discharge of lymph. He informed me that about a week previous he had experienced "a bad feeling" in the eye, accompanied with frequent shooting pain through the orbit. That by the advice of a physician he had applied a warm hop fomentation over the eye, and followed it with a warm poultice of bread and milk, and although this assuaged the pain to a certain extent, the lids nevertheless continued to swell, and the second or third day after the application of the poultices he lost his sight. Finding that nothing could be done to restore vision—for the cornea was destroyed when he submitted to my treatment—I directed my remedies to the reduction of the chronic inflammation, and the then existing symptoms.

J. W. came under my care at about the same time, with the lids of the right eye very much swollen and the cornea presenting nearly the same aspect as in the above-mentioned case. Warm poultices had been applied to the eye, followed by the results already described. He stated, that after applying the poultices to the right eye, the left became inflamed, but by the use of cups, blisters, and a lotion, prescribed by a physician, the inflammation in the left eye ceased.
From the history of these cases, I feel confident that the destruction of the organ, in both instances, resulted from the inappropriate use of the poultices.

A practice which originated with Dr. Francis Moore, of Mass., and which found a distinguished advocate in Prof. Sewall, of Washington, D.C., has been found very successful in the treatment of ophthalmmy. It consists essentially of free depletion, followed by pressure. So soon as the active symptoms are subdued by the antiphlogistic regimen, a pad of silk or soft linen is applied over the eye, then a bat of carded cotton or scraped lint is confined, by a thin, light bandage, so tight as to afford gentle and comfortable compression, so as not to afford pain or uneasiness. This compress is to be removed twice in the twenty-four hours, and replaced immediately by another of the same material. During the time the compress is being used, a minute quantity of cerate is introduced into the eye. It is prepared after the following formula.

B. Hydrg. oxyd. rub., grs. xlv.
Lapis Calamin, " xxx.
Cinnabar native, " xv.
Litharge, " xxx.
Axungia porc., §i.

Levigate repeatedly and mix.

Prof. Sewell thinks he fulfils the three following indications by the pad and bandage, viz:

1st. Effectually to exclude the light from the eye.
2d. The globe of the eye is prevented from rolling.
3d. The distended vessels are compressed and disgorged.

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ARTICLE X.


The adulteration of medicines is now so frequently practised by manufacturers, that it has become exceedingly difficult to procure the most common chemicals, and manufactured articles, in a state at all approaching purity. To remedy this enormous evil, the most stringent legislative enactments are
necessary, but are utterly refused by our legislators. Physicians must therefore depend upon their own influence for checking the evil; if that fails, they must become, through necessity, their own manufacturers. That it has already reached this latter alternative few will deny; but unfortunately for us, there are very few in the country who are fully prepared in all respects for the business. It becomes us, then, to make Pharmacy a subject of more particular study than heretofore; to prepare all powders, tinctures, ointments and officinal compounds in our own offices. In this way, we may become assured that the officinal compounds are prepared correctly, but for security against imposition in the purchase of the crude materials, our only safeguard is, an accurate and intimate acquaintance with the pure drug. There are always some respectable men engaged in the business of selling drugs, who keep on hand a part of their stock of a quality which they can warrant. It becomes us to search out these men, and make our purchases from them. But even then it is necessary that we should make a personal visit to their establishments, and prove our acquaintance with the articles we wish. Unless this is done, our orders should be sent only to those in whom we know that confidence can be placed, with the condition expressed that all articles not satisfactory are to be returned.

But for pure chemicals we can have no other remedy than the habit of analysing all parcels we receive, and returning all that are impure. When this is habitually done by physicians, we will soon cease to hear of so much uncertainty in medicine. It can hardly be expected that every physician should establish for his own use, an extensive chemical laboratory, but it has now become a matter of necessity, that every physician should prepare himself most fully for making accurate analyses. The expense of the necessary apparatus is not so great as to put it beyond the power of all to obtain it; but, for economy, clubs of physicians in every neighborhood might be formed, who can divide the expense of the outfit and share alike the benefits. This plan would, if fully carried out, do more to re-instate medicine in its purity than any laws that can be enacted.

Among the compounds most frequently adulterated, the Pil. Hydrarg. is most conspicuous. Good Blue Pill can now be
very seldom indeed bought at the drug stores. The last pound jar which the writer purchased was utterly worthless in ordinary doses, requiring from 50 to 60 grains to take as much effect as 5 grains of that of officinal purity. No other quality could be conveniently obtained at the time, and the writer was forced to prepare a few ounces himself. This was found to be no inconsiderable labor, and led him to try different processes for more easily effecting the object. Just at this time a short extract in the Southern Medical and Surgical Journal furnished him with the desideratum.

It being a matter of not much importance what the substance is that is used for the division of the mercury, so that the mercury itself is completely extinguished and uniformly mixed in the mass, the following formula is offered to the profession, as an easy method of preparing good Blue Pill mass, and which is entirely free from objection, on account of the materials used in the formation.

\[
\text{Pt. Purified Quicksilver, } 2 \text{ oz.} \\
\text{Spermacetti, } 2 \text{ oz.} \\
\text{Olive oil, } 2 \text{ drs.} \\
\text{Flake manna, } 4 \text{ oz.}
\]

Reduce the spermacetti to powder first; then triturate the mercury with a heavy pestle in a large iron mortar a few minutes, add the olive oil, and continue the trituration until the globules disappear, which will be in a few minutes; add the manna, and beat the mass until it is intimately mixed.

The above will give a mass containing one grain of mercury in four, but the proportion of ingredients can be arranged by any one so as to make it stronger if desired.

With the foregoing compound, I am well enough pleased to continue its preparation for my own use, and never to purchase blue mass from the drug stores. It is offered to the profession as a resource, when they cannot purchase the pure article, not at all with any hope of its superseding the officinal pil. Hydrargyri.
Case of Disease of the Knee-Joint. By Wm. Nephew King, M. D., of Roswell, Geo.

Monroe, a negro boy, aged 20, was attacked with pain and swelling in the left knee-joint, attended with considerable constitutional disturbance. Before he came under our care the 8th December last, he had been treated by an accomplished physician, who was a visitor in the family of the owner. The precise symptoms of the case, and the treatment, previous to the above date, we are unable to give. We were informed by the gentleman in attendance, that preparations of colchicum antumnale, cupping and blisters had been employed and remedies used, which are generally indicated by the symptoms of a diseased joint.

From the complicated structure of the knee-joint, the symptoms of morbid action in it are, in the first stages, necessarily more or less obscure. At the time when the patient came under our care, the following was his condition, viz: extreme emaciation, loss of appetite, great weakness, wasting of the left thigh, with great swelling of the parts surrounding the knee. By careful examination the presence of pus was discovered, and two openings were made to admit of its escape. They were kept open for two days, when, on a further examination, a sinuous abscess was discovered extending some six inches up the thigh, beneath the rectus muscle, and one extending down to the popliteal space, where another opening was made. Through these incisions the pus was discharged very freely; but the disease had so far destroyed the joint and prostrated the patient that there was no hope left for him, except in an amputation, and though there seemed to be little or no hope even in this, we determined, on consultation with a friend, to perform the operation.

Accordingly, placing our patient under the influence of Chloroform, we proceeded with the operation. The patient was drawn down to the foot of the bed, and the limb taken off in the manner of Liston, (anterior and posterior flaps,) without the loss of much blood. In place of applying the tourniquet, pressure was made on the artery by an assistant. After the ligatures, sutures, and the simple dressings, the patient was
moved again on his bed, and awoke without being aware of the operation he had undergone.

Whether this was in the first instance a diffuse cellular inflammation, in which the synovial membrane was subsequently involved, or whether it was primarily situated in the structure proper to the joint, we are not of course prepared to say. It may have been either, for the cellular inflammation may be followed by an inflammation of the synovial membrane, and this in its turn may terminate in ulceration of the cartilages.

On examining the joint, after the operation, the abscess was found even more extensive than we had anticipated, the cartilage covering the head of the tibia was destroyed by ulceration: that of the femur, and the patella, was also to a considerable extent. Pus was found in the joint. For analogous cases, see Brodie on Diseases of the joints, particularly case liii., and Mayo.

At this time our patient is quite recovered, and about on his crutches.

The case is peculiar, only in the great degree of disorganization which had taken place in the joint without a corresponding intensity of symptoms, and in the success which, by means of the chloroform, attended the operation; for the patient was so far reduced that doubts were entertained whether he could survive during the operation.

PART II.

Reviews and Extracts.


The transactions of the American Medical Association, after a long and provoking delay, have been presented to the medical public. For this delay it appears that the Committee of Publication are not at all responsible, and in justice to themselves, they have placed the blame where it properly belongs. It appears that the committees of the Association generally, retained their reports for revision or completion, and did not
forward them until after repeated applications. Moreover, the authors of some of these reports required that the proof-sheet should be sent to them for correction, which rendered it necessary to forward proofs to the most distant parts of the Union. It is to be hoped that in future, reports will be completed before they are presented to the Association, and so fairly transcribed as to render the transmission of proof-sheets over the whole country unnecessary.

The very great size of the volume has rendered it impossible for us to do more than give it a superficial examination. If all the committees had kept within their prescribed bounds, the size of the volume might have been much reduced, without in any degree impairing its interest or value. This remark applies in an especial manner to the report of the Committee on Medical Sciences; for though their duties were restricted to a notice of the more important improvements and discoveries in the sciences "bearing directly on the condition and progress of medical knowledge in America," they have "followed the example of their predecessors," and given a retrospect of medicine abroad, as well as at home.

The first forty-eight pages are devoted to the minutes of the last annual meeting of the Association. A number of resolutions were reported by the Committee on Medical Education, and after some discussion were adopted. These resolutions (see Trans., p. 40-41) approve of those in relation to medical education adopted by the Convention which met in Philadelphia in May, 1847; invite the attention of Medical Colleges to the resolutions of the Committee on Medical Education adopted by that body; advise and request physicians generally to require of those who desire to become their pupils, evidence of proper general education; refuse to sanction or recognise "college clinics" as substitutes for Hospital Clinical instruction, and urge the formation of State Medical Societies where they do not already exist. The Association further recommends "the various schools of Medicine to meet at Cincinnati, before the next annual meeting of the Association, and present a plan for elevating the standard of medical education."

Various other matters of interest were brought forward, and were referred to the appropriate committees to be report-
ed upon at the next annual meeting. The Association adjourned after a session of four days, and it may puzzle some of our readers to understand how so many voluminous reports from numerous committees, besides discussions, and other business, could have been gotten through in so short a time. It appears that the length of the Reports deterred the Association from hearing them, and that the reading was dispensed with in most instances.

_Report on the Progress of the Medical Sciences._—This report occupies more than eighty pages, a large portion of which is devoted to abstracts from foreign journals, which, though interesting, certainly did not come within the regulations prescribed for the committee. It also contains a large amount of interesting matter derived from the American Journals. The great variety of topics introduced, some of the most important of which have already been presented to the readers of the Journal, renders it impossible to make a synopsis of its contents, we therefore can only recommend it to our readers as worthy of an attentive perusal.

_Report on Practical Medicine._—This report is also quite long, and is mainly devoted to "the progress of the leading epidemics of the past year (1848); referring as occasion requires to medical topography, and to the character of the prevailing diseases in particular localities, or in the United States generally," during the same period. The materials of which this report is composed, the committee have derived mainly from the medical journals, particularly those of the West and South.

Typhus fever appears to have prevailed in most of the large sea-port towns, and in various sections of country, typhoid fever was epidemic. In some localities where it prevailed extensively, no suspicion of its introduction, by European emigrants, existed. Erysipelas appears to have been a frequent disease in many parts of the country, and in some places was epidemic. Portions of the Eastern and Western States seemed to have suffered most severely. In the erysipelatous fever which prevailed at Danberry, Con., peritoneal inflammation was a very common occurrence. The intimate connection between epidemic puerperal fever and erysipelas has often been observed,
and some statistics are brought forward in the report which go to establish the fact, that those two diseases generally prevail at the same time and place.

Small-pox appears to have prevailed to some extent in various portions of the Middle and Eastern States. Scarlatina of a malignant character prevailed in many localities, and in Lawrenceburg, Tenn., was very fatal. In many instances persons died in twenty-four hours: the brain appeared to be the organ which principally suffered. Measles also prevailed in many places, but was generally of a mild type.

The report states, that the most widely extended epidemic of 1848 was dysentery. But few sections of country escaped bowel affections in some form, and in some places, the mortality was very considerable. Cerebro-spinal meningitis prevailed as an epidemic in Montgomery, Ala., and also in some towns in Massachusetts. In Montgomery, during the months of February, March and April, 250 cases of the disease occurred. The cases appear to have been more numerous among the blacks than the whites. The duration of the disease was variable, but in most instances it terminated on, or before the fourth day. The mortality was confined to the malignant cases, in which it was estimated at 60 per cent. In the epidemic at Sutton and Millbury in Massachusetts, every case, amounting to 19 or 20, proved fatal. During the year 1848, yellow fever was epidemic in New Orleans, the deaths numbering 716. A mild form of the disease also prevailed at Natchez—the deaths were 42 in about 300 cases. In August, 1848, yellow fever appeared at the Quarantine ground on Staten Island, N. York. The cases were not very numerous, and were generally of a mild type. A committee from the Board of Health investigated the origin of the disease, and referred it to certain vessels recently arrived from New Orleans with yellow fever on board.

A very considerable portion of this report is devoted to the subject of Cholera. This disease appeared at the New York Quarantine ground among the convalescent patients, soon after the arrival, on the 2d December, of a ship from Havre, on board of which cholera was prevailing. A ship from Havre, on which several deaths from cholera had occurred, arrived at New Orleans on the 11th December. In a few days cases of the
disease began to occur daily in parts of the city remote from the infected ship. In New York the disease did not prevail to any considerable extent, the whole number of cases amounting to 91, and the deaths to 47; but in New Orleans it soon became epidemic, and in the space of one month carried off more than 1200 persons. From New Orleans, the disease was carried by the steam-boats to the towns along the Mississippi, and Ohio, and into Texas, where it was quite fatal. The committee have given no opinion as to the contagiousness of the disease, but they state that "in New Orleans there is no evidence that the disease spread from individual to individual; on the contrary, it appeared simultaneously in different parts of the city."

To this report are appended communications from Dr. J. F. Garrison, of Swedesboro', N. J., on the prevalent diseases of his vicinity; from Dr. Norrill Wyman, on Dysentery, as it prevailed in Cambridge, Mass., in the years 1847 and 1848; from Dr. J. Fithian, on Bilious fever, as it prevails in the eastern portion of New Jersey, and from the same gentleman on Erysipelas.

Report on Surgery.—This report occupies but little more than twenty pages, and keeps strictly within its prescribed bounds. A considerable portion is devoted to the subject of anaesthetic agents. The committee, with the exception of Prof. Knight, prefer the Chloroform to the Sulphuric Ether, because it is "by far the most powerful anaesthetic agent, and least annoying in the act of respiration." Prof. Knight prefers the ether as less powerful and dangerous in its effects; and to this opinion many seem strongly inclined since the occurrence of quite a number of fatal accidents from chloroform. It is true, that we have comparatively few instances on record, of the fatal effects of ether, but the committee attribute this greater apparent safety of the ether to the fact that it is much more rarely employed than the chloroform, and its fatal effects are more remote, and therefore likely to be referred to other causes. "Sulphuric ether, however, is by no means the innocuous thing which some have fondly believed it to be." In relation to the dangers of chloroform, the committee remarks that "he who fixes his attention exclusively on the fatal cases from chloroform, without adverting to the vast number in which it has
been employed, is very naturally filled with alarm. But when we consider that this agent has probably been administered to millions of subjects, and that only fifteen cases of death from its use can be adduced, the individual who subjects himself to its influence ought to feel no more apprehension, than he who takes his seat in a rail-road car, and much less than one who essays a voyage across the Atlantic.” The conclusions of the committee, drawn from the experience of surgeons at home and abroad, we will present to our readers in another part of this number.

The report notices some improvements in the treatment of fractures. Prof. Pope substitutes, with very happy results, the collodion, for paste and dextrine, in the treatment of the fractures of children. “A strip of lint,” he says, “saturated with it, makes a convenient splint.” Prof. P. condemns the apparatus of Jarvis, for reducing fractures and dislocations, and in this the committee fully concur.

Dr. Smith, the chairman, presented to the Association an apparatus applicable to all fractures of the lower extremities, from hip to foot, the usefulness of which in a case of fracture of the neck of the femur is said to have been tested successfully by Dr. Geddings of Charleston. Dr. Smith also submitted to the approval of the Association, a method of reducing dislocations of the shoulder, “the peculiarity of which chiefly consists in the application of the counter-extension to the opposite wrist, extension being made from the wrist of the dislocated member.” The method of Dr. Smith we will present in another part of this number. The same gentleman also presented an instrument, not generally made known to the profession, which he has used in about fifty cases of lithotomy. Dr. Gibson bears testimony to the value of this new instrument, and deems it the “best and most complete of all surgical appliances.”

The report refers to the gutta percha as a very important adjuvant in the practice of orthopedic surgery. Dr. Gibson, of Richmond, in response to the circular of the committee, urges the importance of after mechanical treatment in cases of tenotomy for club foot. The chairman referred to an orthopedic operation performed by himself on an infant child. This was the first section of the tendo Achillis for club foot ever
made in America, and was successful. "The subject is now a young lady; the foot and ankle are perfect in form, position, and strength."

Dr. Bigelow, of the Massachusetts General Hospital, has proposed the gutta percha in place of wax, or other impressible materials, for the purpose of ascertaining the form, size, and direction of strictures of the urethra. He employs it in the following manner: "A bougie of this material is oiled, then its point is passed to and fro rapidly, in the flame of a candle till the nail will indent it. If it be now quickly passed down to the stricture, and urged against it with a force equal to a pound or two of weight, and then allowed to cool during three or four minutes, it will retain, when withdrawn, a perfect impression, thus furnishing to the operator information which will give precision to the mechanical means subsequently resorted to."

On the subject of Lithotripsy, the report says, "it has been generally thought to be ineligible on very young subjects on account of the narrowness of the canal, and the unmanageable-ness of the patient. The chairman of this committee, however, has performed lithotripsy with Jacobson's and Heurteloup's instrument in infants two years of age, in no less than four instances, and in several other very young subjects. In one respect he has found the operation more certain than on adults. The bladder expels the fragments more promptly."

The committee refers to a case of traumatic aneurism resulting from the application of the ligature for the cure of spontaneous aneurism, reported by Prof. Willard Parker, of New York, in which the efficacy of compression made by simply imposing weights upon the part was fully demonstrated. The mode adopted in this case by the operation is thus described. "He prepared a compress of folded adhesive plaster, the plaster side out, two and a half inches long, and of the size of the finger. This he placed longitudinally along the artery, beneath Poupart's ligament, so as not to interfere with the return of blood by the vein. Another, similar, but flat, and one and a half inches wide, was superimposed, and prevented the displacement of the first. Over the whole were placed a compress of linen and the spica bandage. A bag of shot, weighing five pounds, was then placed upon the part, with the effect of
subduing the pulsation completely. After five days this was replaced by another, weighing two pounds, which was continued for two days. Complete success crowned this expedient."

Some other cases of interest are referred to, but we must refer our readers to the Transactions for them. The committee conclude their report with the declaration that, "in this department of medicine, the spirit of improvement is abroad in our country, and that the inventive genius which we claim as a national characteristic, is being exercised with signal success in whatever relates to the science and art of surgery."

Report on Obstetrics.—This report was prepared by Dr. Gilman, owing to the illness of the chairman, Dr. B. R. Welford, of Virginia. It is quite an able paper, extending to near twenty pages. It refers to the improvements in our means of diagnosis, by the speculum and other means, by which many of the opprobria medicorum among the diseases of females are now accurately distinguished, and subjected to modes of treatment very generally successful. The subject of retroversion engages the attention of the committee, and they have brought to notice the sound, and the stem pessary, proposed by Prof. Simpson, as means to be employed in such cases. Of the sound they speak favorably. The employment of the sound as a means of diagnosis has been denounced by some English obstetricians; but whilst admitting, that in the hands of the ignorant and careless it will probably do harm, the committee asserts that "it can be used without danger." In relation to the use of the stem pessary, they pronounce no opinion. We feel no hesitation in expressing the opinion that the stem pessary should be entirely proscribed. It may be true, that the evidence brought forward by Prof. Simpson abundantly proves that the presence of the stem or shaft, in the uterine cavity, does not always produce as high a degree of irritation as we might have expected, yet the observations of others conclusively demonstrate that it does frequently produce the most alarming effects. Velpeau, after a fair trial, was forced to abandon its use. Dr. Meigs approves of the sound, "but condemns the pessary most unequivocally." Reference is made to an instrument invented by Dr. Bond, of Philadelphia, for the replacement of the retroverted uterus, which has been employed with success in a case
where Simpson's sound could not be introduced. The committee are of the opinion that this instrument will "prove a valuable addition to our armamentum obstetricum."

The report refers to some attempts made by Dr. Van Buren, of Bellevue Hospital, to cure prolapsus uteri, by destroying some strips of the vaginal wall with the actual cautery, a mode of treatment originally suggested by Dr. Marshall Hall. These operations were not perfectly successful, yet the results were very encouraging, and the committee express the opinion that the operation deserves more frequent and extended trials than it has yet received.

The report notices the modification latterly proposed, in the management of cases of placenta prævia, which consists in the detachment of the placenta from the uterine wall, and gives the grounds upon which the practice is advocated.

"1st. The old plan of rupturing the membranes and turning the child, has been, according to recorded experience, singularly unsuccessful, one in three of the mothers perishing, and the proportion of children saved being inconsiderable.

2d. In not a few cases the rigidity of the os and cervix uteri renders the operation of turning exceedingly difficult—indeed almost impossible; and when performed under such circumstances, it is nearly always, and of necessity, fatal.

3d. The detachment of the placenta, will, in a vast majority of cases, immediately and effectually check the hemorrhage."

The committee give the principal arguments which have been adduced in the support of these propositions, and whilst admitting that the detachment of the placenta is practicable, and that such detachment will materially check the hemorrhage, they look upon it "only as a resource when turning is impossible, or from the state of extreme exhaustion, likely to destroy life. In the former category will be found the so-called cases of rigidity of the os, but in which, as the committee believe, the difficulty really depends on an undeveloped cervix; in such cases the operation is valuable, and to such the committee are disposed to confine it."

A large portion of the report is devoted to the use of anaesthetic agents in obstetrical practice. The facts with which the journals have been teeming for many months have generally
impressed the medical public favorably with regard to the employment of these agents in midwifery. The committee state that the practice is gaining ground every where, and that of the thousands of parturient females who have been subjected to the influence of anaesthetic agents, *no one has lost her life in consequence of the pains of labor having been controlled by etherization.* For a solution of the question, why chloroform, which has been used in obstetrics more frequently than in surgery, is sometimes followed by fatal consequences in the latter, but never in the former, the committee refer to the explanation proposed by Prof. Channing. "In surgical cases, the agent is used as a preparation to the operation, to prevent pain; pain is not present, it has as yet exerted no influence on the nervous system, that system as yet has not been exhausted by suffering; it is in its integrity, and has of course its greatest capacity of impression, the greatest amount of sensibility, with the least power of resistance. The whole nervous power is brought into relation with the cause affecting it, and yields to the impression. For the most part the mind consents to the same thing, and no moral resistance is made. How is it in labor? Here pain is present, and has been for a long time; the nervous system has been greatly taxed; its power, so to speak, been used up. Impressions upon it are weaker than they would be under other circumstances, the system comes rapidly under the anaesthetic influence, very little ether or chloroform is necessary, the consciousness need not be destroyed, sensibility need never be abolished; neither of these states is desired or aimed at by the judicious accoucher."

The report invites attention to the reputed prophylactic powers of Quinine in puerperal fever. This article has been tried by M. Londet of Rouen, in the endemics of the Hôtel Dieu, in the years 1843, 4, 5 and 6. Of one hundred and four patients who took no medicine, forty were attacked by the fever—while of forty who took quinine, only two had the disease. To this report are appended the history of two cases of retro-flexion of the uterus, one by Dr. A. C. Post, of N. York, and the other by B. W. McCready, of New York.

*Report on Medical Education.*—This report examines the general condition of Medical Education in the United States;
compares it with the state of Medical Education in Great Britain, France, Germany, and other enlightened European nations; notices the requirements in the U. S. Army and Navy, and the legal requirements exacted by the different States of the Union. Some measures, prospective and established, in reference to medical education, and the reputable standing of the profession, and certain matters specially referred to the committee, are also considered.

The length of this report, and the variety of topics which are introduced, renders it impossible to do justice to it by any synopsis which our limits will allow. It appears that the subjects taught in the European schools of medicine, are much greater than in this country; the time devoted to their study is much longer; and the subjects are so arranged, that they follow each other in a regular order. In the European schools, satisfactory testimonials of a suitable preliminary education are required, and examinations are more numerous and comprehensive than in this country. In Scotland alone, is punctual attendance exacted. The report gives its approval to the system which requires a larger number of teachers, and of subjects to be taught, but does not deem it essential or expedient, to adopt the numerous subdivisions which exist in some of the European schools. From this report, we learn that in the States of the Union generally, no legal requirements are exacted of medical practitioners. The only exceptions are, New Jersey, Louisiana, Michigan, and the District of Columbia.

Among the measures of reform in the system of medical education, the committee recommends that a certain degree of preparatory education should be required of those who engage in the study of medicine: they refer approvingly to the action of the Medical Society of New York, which provides that, "to be admitted to the offices, of any of the members of the society, it shall be required that the applicant shall, in addition to a good English academic education, have made respectable attainments in the Latin and Greek languages." They urge the importance of hospital clinical instruction, and of making attendance upon it, obligatory upon pupils. They condemn what are called "College clinics," and "concur unanimously in the opinion, that they present no adequate equivalent to the
student, when resorted to as a substitute for actual hospital attendance." They also object to the private examination of students, and recommend that, if not public, they "should be conducted in the presence of at least a majority of the professors, and should be in writing, as well as viva voce." The committee think much would be gained by a division of the subjects taught, into two classes, and propose that at the end of each course, the student should be examined, and a certificate of acquirement given. They also reiterate the recommendation of the Medical Convention of 1847, that the collegiate courses should be extended to six months. Other matters of interest are brought forward which we cannot now notice.

To this report is appended the "views of the Medical Faculty of Harvard University, relative to the extension of the Lecture Term," which are adverse to such extension. This paper is ably written, and some idea may be formed of its character from the fact that the Association appointed a special committee to reply to it. This reply is also appended. If our limits permitted, we would notice these two articles at length.

*Report on Medical Literature.*—The subjects embraced in this report are—1st. The general character of the Periodical Medical publications of the United States; 2d. The more important articles therein presented to the profession; 3d. Original American Medical publications; 4th. Medical compilations and compounds by American writers; 5th. American re-prints of Foreign Medical works; and 6th. All such measures as may be deemed advisable for encouraging and maintaining a national literature of our own.

"The present aspect presented by medical journalism in our country is full of auspicious omens of the future progress of medical science. The first minds of the profession are engaged both in their editorial management, and in the making up their original, and review matter. A wise and liberal spirit generally pervades and animates the editorship. No personal abuse or vindictive feelings are allowed to stain their pages, and disparage the dignity of the science, to the promotion of which they are devoted."

At the time this report was prepared, there were published in the United States, twenty original, or native, and four for-
eign or re-published medical periodicals. Of the former, five are published quarterly; six bi-monthly; six monthly; one semi-monthly; one weekly, and one irregularly, (the Transactions of the Philadelphia College of Physicians.)

We must pass over the other subjects of this excellent report, and will only bring to the notice of our readers a measure it proposes, which we doubt not will receive the approbation of the profession: "it is the appointment of a Committee or Board of Publication, at Philadelphia or New York, whose duty it should be to receive, and carefully read the original or translated works which American writers might offer, and to have them published under the superintendance of the board or committee." "This board or committee of publication should have funds raised by subscription, after the manner of the Sydenham Society in England, placed in its hands."

Report on Public Hygiene.—This report, with its appendices, occupies over 200 pages. It notices the subjects of drainage, street cleansing, water, building, and ventilation, nuisances and disinfectants. To the report are appended sanitary reports from many of our large cities; a communication from Dr. Fenner on the Yellow Fever quarantine at New Orleans; one from Prof. Jackson on the influence upon health produced by the introduction of Tea and Coffee in large proportion into the Dietary of children and the laboring classes; one from Prof. Johnson on the introduction of water and gas into cities; and one from Dr. Harris on the use of disinfectants in the Navy.

Report on Adulterated and Sophisticated Drugs.—This report is quite short, but it contains many interesting facts, and some valuable suggestions which we may notice hereafter.

Report on Indigenous Medical Botany.—This report is also short, and is mainly devoted to an examination of two articles, the Sarracenia, or side-saddle flower, and the Cornus Florida. Of the former article the report says, "from its physiological effects, we should confidently expect the remedy to be of very great value in all those morbid conditions characterized by depression of organic actions, loss of appetite, and deranged digestion, unaccompanied by inflammatory action." In speaking of the Cornus Florida, the report pays a deserved compliment to
the article of our esteemed young friend, Dr. D. C. O'Keeffe, which originally appeared in this Journal, and draws largely from it, to illustrate the properties, &c., of this indigenous medicine.

To this report is appended a long and elaborate report by Dr. F. P. Porcher, of South Carolina, on the Medicinal plants of that State, indigenous and introduced, and one by Dr. Stephen W. Williams, of Mass., on the indigenous Medical Botany of that State.

We hope that the foregoing brief and imperfect synopsis of the transactions of the American Medical Association, will induce our readers to purchase the volume. It contains a large amount of interesting and instructive matter to which we have not even alluded, and will fully repay any one for its cost, and the time expended in its careful perusal. A copy may be procured by remitting to Dr. Issac Hays, Philadelphia, three dollars in par funds and free of postage.

**Therapeutic Effects of Aconite. By Dr. Teissier, of Lyons.**

Condensed and translated for this Journal, by J. A. S. Milligan, M. D.

We find in the Revue Medico-Chirurgicale an article on this subject by Dr. Teissier, of Lyons. After alluding to the discrepancy in the published opinions of different authors on the therapeutic value of the preparations of aconite, and explaining this discrepancy by a want of similarity of cases in which the remedy was employed, he proceeds to record the results of his researches, undertaken for the purpose of defining in which diseases this medicine was indicated.

Dr. T. has examined aconite with reference to its narcotic and antiphlogistic actions—the two modes of action usually ascribed to it. That this remedy possesses narcotic properties, he thinks there can be no doubt. Its power, however, was found to be more feeble than that of opium, belladonna, or the datura, and the field of its applicability more circumscribed. It afforded no relief to patients affected with exostosis, cancer, nephritis, paronychia, etc., but was very efficacious in assuaging the pains of diseases recognizing for their cause a derangement
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of the functions of the skin, as, for example, rheumatism, angina, odontalgia caused by cold, etc. Dr. T. concludes, therefore, that aconite may be of neat service to practitioners as a narcotic, but that this is not its chief property. He has administered aconite in many diseases for the cure of which blood-letting is deemed by all practitioners indispensable, such as peritonitis, apoplexy, and hypertrophy of the heart; but he has never met with a single case in which he was convinced that this medicine acted as a useful substitute for venesection, or as a directly antiphlogistic remedy. He does not wish to be understood as affirming, however, that aconite never acts as an antiphlogistic; for he will show hereafter, that in certain diseases, as in measles, scarlatina, etc., it may exert a depressive influence on the circulation: he thinks that it produces this effect, however, indirectly, and by regulating another function, the derangements of which had caused the disease.

According to Dr. Teissier the action of aconite is directed chiefly to the skin. Its special property is to eliminate from the cutaneous tissue all noxious principles, and to re-establish the disordered functions of this organ. He recommends the preparations of aconite, therefore, in all diseases caused by a "derangement of the cutaneous secretion, and consecutively by a catarrhal jetée on the articulations (articular rheumatism), on the muscles (muscular rheumatism, lumbago), on the nerves, (sciatica, odontalgia), on the mucous membranes, (coryza, angina, bronchitis, grippe, catarrhal fever, etc.)" Dr. T. recommends aconite also at the commencement of all eruptive fevers.

We will notice briefly some of the diseases in which he has found aconite particularly useful.

Courbature.—This mild disease, caused by a suppression of perspiration, and characterized by pains in the limbs, shivering, lassitude, headache, and general aching, says Dr. T., may serve as a type for the administration of aconite. In this affection he prescribed from 5 to 10 drops of the tincture during the day.

Catarrhal Fever.—Dr. T. found aconite equally serviceable in catarrhal fever. The therapeutic indications in this fever are: 1. To re-establish the functions of the skin; 2. To combat the local irritation of the nose, throat or bronchi. He affirms
that aconite fulfils perfectly the former of these indications; but that in carrying out the latter, it requires the assistance of other means, such as opiates, vesicatories, etc.

**Angina, Acute Bronchitis.**—"With MM. Tessier (of Paris) and Gabalda, we have frequently known aconite," says the writer, "to exert a happy influence in simple angina, and in acute pulmonary catarrh, mitigating readily the pains of deglutition in the former, and quieting the severe cough of the latter. We have found it only necessary in these cases to administer from 5 to 10 drops of the tincture every day."

**Grippe.**—Dr. T. states that in this disease, which bears a striking resemblance to curbature and catarrhal fever, aconite is very serviceable: it restores the healthy action of the skin, relieves the painful sensations of the disease, and abridges its duration. He considers it worthy of remark, too, that those patients who made use of this medicine did not retain so long the feeling of depression and general aching, which so frequently follows an attack of grippe.

**Rheumatism.**—Dr. T. has not found aconite equally useful in all cases of rheumatism. He derived the most decided benefit from it in cases of recent origin, attended neither by swelling nor fever, or in which these symptoms were but slightly developed. In these cases he thinks it preferable to blood-letting, to morphine, and to belladonna: to blood-letting, which only combats the pain, which does not remove the rheumatic principle, and which frequently predisposes the part affected to stiffness, swelling, and a recurrence of the evil: to morphine and belladonna, because they are not so well tolerated by the stomach, and because they too are merely palliatives. In acute articular rheumatism, with fever and decided tumefaction, the writer has found aconite less effectual than in the cases just mentioned. But even in these cases it may be administered at the commencement, in order to diminish the fluxion to the joints.

In chronic rheumatism, aconite did not prove so serviceable as in cases of recent origin. Dr. Teissier has known instances, however, where obstinate rheumatic pains of several years duration were overcome by the persevering employment of this remedy. He states, further, that aconite is undoubtedly effica-
cious, when its use is continued for several months, in subduing predispositions to rheumatism. This result it produces by restoring the functions of the skin, especially by promoting the insensible perspiration, and by neutralizing the influence of atmospheric moisture and of the rheumatic principle.

The dose of aconite, the writer observes, must be much larger in rheumatism, than in the diseases previously noticed. We should begin, he says, by giving from 10 to 20 drops of the tincture, and increase the dose gradually to 4, 6, or even 8 grammes a-day.

_Eruptive Fevers._—Dr. T. has employed this remedy very successfully in exanthematosu fevers, in rubeola, variola, scarlatina, urticaria, miliaria, erysipelas, etc. He affirms that in all these diseases, but especially in the measles of children, aconite exerted a happy influence on the fever and on the eruption, which came out with readiness, and ran its course with remarkable regularity. “But,” he adds, “if complications occur, it will be necessary to combat them by the other means which experience has sanctioned.”

_Erysipelas._—In this section, the writer treats of the action of aconite in erysipelas complicating wounds. He has known aconite to afford very prompt relief in traumatic erysipelas, attended with fever, rigors, inclination to vomit, temporary delirium, etc. He remembers, particularly, two patients, who were affected very seriously with this disease, but who were relieved, in a manner really surprising, in twenty-four hours. He recommends very highly the employment of this remedy in hospitals where traumatic erysipelas is so common.

_Pneumonia._—Dr. T. has administered aconite in a great many cases of pneumonia. “On the success which has followed the employment of aconite in this disease,” says he, “the homœopathists base their assertion, that this medicine may be usefully substituted for blood-letting.” He has found aconite serviceable in the early stages of pneumonia, before the inflammation had become decided; but when once auscultation had proved that the tissue of the lung was gorged with blood and denser than in the normal state, he has found this medicine insufficient, and has been obliged to resort to antimonials. He does not think, therefore, that it follows as a natural conse-
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quence, because aconite contributes to the moderating of the febrile symptoms at the commencement of the disease, that it is for this reason an antiphlogistic remedy, and that it acts like venesection. He says, further, that he does not believe blood-letting to be indispensable in the treatment of pneumonia; that in fact we may do without it in the majority of cases, excepting those very rare instances where the oppression is very great.

The writer remarks, that all that he has said respecting pneumonia, is applicable also to pleurisy. "Aconite," says he, "may be useful at the commencement of the disease, but when the effusion is pretty considerable, it becomes only an accessory element in the treatment, and it then becomes necessary to join with it purgatives, diuretics, and blisters."

Dr. T. has used the preparations of aconite in typhus, and in inflammatory fevers, but without success. He is induced to believe that aconite would be a useful remedy in syphilitic eruptions; but having never administered it in these diseases he is unable to bring any facts to the support of his opinion.

He cannot say anything of the value of this medicine in chronic psoric affections.

Dr. T. has had a great desire to try the administration of aconite, in accordance with the advice of M. Tessier (of Paris), in the purulent diathesis. He would state, however, that the purulent diathesis is a disease so terrible, and which carries off patients so rapidly, that he would hardly dare to trust to the action of aconite, except as an adjuvant, to arrest its progress.

Beside the diseases already enumerated, Dr. T. thinks that there are many, in the therapeutics of which aconite may enter as an accessory. As a general rule, he observes, we may derive benefit from its employment whenever we are called upon to treat a disease, in which the cutaneous action is abnormally performed.

Mode of Administration.—In rheumatism, neuralgia, or in any other painful disease, where the anodyne effect of aconite is desired, Dr. T. gives from 10 to 20 drops of the tincture, increasing the dose gradually to 3, 4, 5, and even 8 grammes a-day. In courbature, or catarrhal fever, he gives only from 5 to 10 drops of the tincture in the 24 hours: by this means he reduces the pulse, and lowers all other febrile symptoms, with-
out producing any of the phenomena of intoxication. He recommends that the medicine be taken some time either before or after a meal. "Of course," says he, "it must be used with more reserve in the cases of children, than in those of adults."

Dr. T. prefers the alcoholic tincture of aconite to the other preparations of this medicine, considering it as being more reliable than the extract. The dose of the extract, he says, is from 5 to 10 centigrammes, increasing it to 50 centigrammes, or even to 1 gramme a-day.

We give here the recapitulation of Dr. T.'s conclusions.

1. Aconite is a very useful medicine, and is applicable to a great number of diseases.

2. It is a narcotic less active than opium, belladonna, and the datura, but which nevertheless may be of great service in painful diseases, especially in those which recognize for their cause a serous, catarrhal, or rheumatic fluxion. It is less successful in the treatment of pains proceeding from diseases decidedly inflammatory.

3. The characteristic property of aconite is, to act on the functions of the skin. It exerts a special eliminatory influence on this membrane, that renders it useful, either as a principal or adjuvant remedy in all diseases where disorder of the cutaneous action constitutes a prominent part, especially in courbature, catarrhal fever, grippe, angina, and acute pulmonary catarrh, articular and muscular rheumatism, especially those cases attended with but little fever, and slightly marked inflammatory symptoms, rheumatic neuralgia, etc.; and in all affections where a morbid principle is retained in the meshes of the cutaneous tissue, and alters its normal organization, as in all the exanthemata (rubeola, variola, scarlatina, miliaria, urticaria, erysipelas, etc.)

4. Aconite is never directly antiphlogistic. It cannot replace blood-letting. It simply diminishes, in many diseases, the frequency of the pulse by quieting the pains which occasioned the fever, or by facilitating the elimination of the morbid principles which kept it up, as in erysipelas and measles.
On the Extraction of Foreign Bodies. By Johann Frederich Dieffenbach. (Excerpta from his Operative Surgery. Ranking's Abstract.)

I.—Removal of foreign bodies from natural cavities, within reach of the surgeon.
II.—Removal of foreign bodies which have penetrated the textures.

I. The Removal of Foreign Bodies from Natural Cavities, within reach of the Surgeon.

1st. The removal of foreign bodies from the nasal cavity.—Foreign bodies in this locality are met with most frequently in children of from three to six years old. Their abstraction is often very difficult, especially when they have caused swelling, and are firmly fixed, and situate high up. The most common are leguminous seeds, peas, beans, little stones, glass heads, bits of wood, pipe-stalks; in the instance of adults, ends of pipes, buttons of foils, fragments of pincers, silver wire left behind after attempts to remove polypus, dossils of lint, blotting-paper, and compressed sponge, which may have served as plugs, to check hemorrhage.

In the first place, it is requisite to ascertain the nature of the foreign body, and also the nostril in which it is lodged. For this purpose, the patient being seated facing a window, the surgeon gently introduces a blunt silver probe, curved at the end, and moistened. The substance, if small, and not wedged in, may be directly extracted with the probe, insinuating the concave side of the instrument behind it, and securing it in a favourable position. Sometimes the irritation excites sneezing and whenever this can be foreseen from the grimaces of the patient, sudden pressure is to be made on the opposite nostril, whereby the body will be expelled through the current of air and the concussion. This will occasionally follow a pinch of snuff.

Should the first attempt fail, and the surgeon be aware of the situation of the foreign body, the head is to be thrown back, supported by an assistant, while with the left hand he presses upwards the tip of the nose. If the subject be a child, he takes a strong silver director, bent at the end like a flat hook, passes it from below upwards round the extraneous substance, lowers his hand in order to elevate the point, and withdraws it in that direction. For infants, an oculist's curette will be found suitable. When the substance is firmly fixed, and cannot be got away with the above instrument, a small pincer may be employed, in the manner of a polypus-forceps, one blade being di-
rected upwards, the other downwards. The expanded blades being made to grasp the body, a few gentle to and fro movements are performed, and the extraction achieved. It is not safe to exercise much pressure in the instance of glass beads, lest they break, or even with regard to swollen beans or peas, lest they be crushed. Residuary fragments often create more mischief than the original mass. These are best removed with an ordinary forceps.

The dislodgment of firmly impacted hard substances from the nostril is frequently difficult. I generally use a straight polypus-forceps. The manipulations here are the same as for the torsion or extraction of solid nasal polypus. The hemorrhage is oft times considerable; to be arrested only by cold injections and cold applications to the forehead and nose. Where the foreign body is too large to pass the nasal orifice, or to be pushed into the throat, it is necessary to divide the ala nasi. Bulky substances alone ought to be propelled into the gullet, because, if small, there is the risk of danger of their dropping into the windpipe. Bits of sponge, lint, and other kinds of plugs, are readily withdrawn by the aid of polypus-forceps, after water has been previously squirted up. To allay pain and inflammation, tepid injections of decoction of mallows may be thrown into the nostrils.

2d. The extraction of foreign bodies from the external auditory passage.—This is often indispensable in the instance of children who have stuck peas, beads, berries, portions of chalk or stone in the ears. These are most readily scooped out with a curved director or a curette; if in the anterior part of the auditory tube, with forceps. In adults, the meatus is sometimes blocked up with dead insects, plugs of cotton, and other things incrusted with cerumen, or with indurated cerumen itself. These, the cause of continued deafness for years, are best extracted with moderate sized polypus-forceps. It is advisable to drop in beforehand a little almond oil, and allow the patient to recline upon the opposite side of the head. Great caution is to be observed, so as not to injure the walls of the meatus, or the tympanum. Should violent bleeding supervene, and there be no likelihood of completing the operation at one sitting, cold, and afterwards warm, applications are to be resorted to, so as to favour suppuration. Subsequently, when the parts are relaxed, the substance may be extracted. Fabricius Hildanus witnessed hemicrania, debility of the entire half of the body, obstinate cough, amenorrhœa, epilepsy, and wasting of the arm ensue from the circumstance of a bead having been forced into the ear. Restoration to health followed its abstraction. Sabatier saw typhus fever and death conse-
quent upon the pressure of a pellet of paper in this situation. Power observed protracted salivation and atrophy result from a dossil of wood. I have noticed, after the removal of foreign bodies, long impacted in the ear, that the hearing became so acutely sensitive, as to require the ears to be stopped with cotton. Should a living insect create any distressing symptoms, it may be picked out by the aid of a tuft of cotton fastened to the end of a match; or killed with a drop of oil, and then readily extricated. Solution of acetate of lead, dilute cherry-laurel water, and a weak solution of corrosive sublimate have been used for the same purpose. Comperat destroyed an insect larva in the meatus auditorius by means of tincture of opium. Andry states that a round worm crept along the Eustachian tube into the ear.

3d. The extraction of foreign bodies from betwixt the eyelids and the eyeball.—These are of every variety, mostly grains of sand, particles of lime, insects, seeds, and the like. They either lie free between the lids and ball of the eye, or are imbedded in the surface of the cornea or sclerotica,—for example, splinters of steel. Foreign bodies, situate beneath the eyelids, are easily removed, provided these are not inflamed and can be held apart. If situate, under the lower lid, this is to be depressed with the left index-finger, held firmly upon the skin. If under the upper lid, the central eyelashes are to be seized with the fingers, and the lid gently dragged from the globe; then, upon the patient throwing his head backwards, the operator keeping his eye fixed on the intervening space, withdraws the mote by the help of a blunt forceps. The curette answers well when the substance is round; dust, sand, and the like are got rid of by a hair pencil, together with aqueous injections; acrid matters, as gun-powder, salt, pepper, by means of a pencil soaked in almond oil. Irritant chemical substances are neutralized by appropriate liquids, and their effects counteracted by a strict antiphlogistic after-treatment; if the eyelids are greatly swollen, they must be carefully opened, and then syringed with warm milk.

Foreign bodies, which penetrate, and are firmly fixed within the inner membranes of the lids, are not easily reached, especially when the eyeball is much inflamed and the eyelids are closed from inflammatory swelling. When such is the case, previous resort must be had to local or general blood-letting, cold applications, and, where the substance has remained a considerable time, to tepid, mucilaginous, and narcotic applications. The speculum is seldom admissible from the risk of irritating the eyelids.

If the penetrant body is sharp, angular, and firmly imbedded,
it must be removed at all hazards, for fear of its perforating the eyeball. Where it cannot be picked out with forceps, and is endangering sight, the external commissure of the lids ought to be snipped. The section of the conjunctiva is generally required from its elimination.

For the removal of minute bodies projected into the membranes of the globe, as tiny splinters of metal, glass, flint, or points of needles, the forceps of Professor Von Ammon is convenient, the eyelids being held asunder with the ordinary speculum. Very small splinters are most readily extracted with a cataract needle. The surgeon may occasionally avail himself of the hooks employed in strabismus operations, for the purpose of fixing the eye. In the instance of seeds of corn, which do not perforate the eye, it is generally necessary to dilate the minute aperture with a fine cutting instrument, ere they can be withdrawn with the forceps.

When the foreign body has remained so long as to have got incased in a capsule, a slight incision is to be made, after which it may be picked out with the point of the knife or with forceps.

4th. The extraction of foreign bodies from the larynx or air-tubes.—(See also some remarks on this subject in our Report on Surgery, vol. ix.)—The extraction of foreign bodies from the air-tubes is an impracticable operation, partly owing to the physiological structure of the parts, and partly to the coincident irritation. The slightest attempt of the kind augments the jeopardy to life. If it be a pointed body, as a needle or fish-bone, there is always a chance of its having stuck in the superior portion of the windpipe. Here, after depressing the tongue with a spatula, it may be seized with a long forceps. Small round substances are apt to fall into the windpipe, and occasion by their ascent and descent, during the act of respiration, the most alarming symptoms. How are they to be secured? With forceps? Death would inevitably follow the experiment. Desault alone proposed the passing of an elastic catheter from the nostril into the trachea.

As a general rule, the foreign body, if of small dimensions, as a pea or little bean, after having lodged for a while in the trachea, drops into bronchus, commonly the right, because that is shorter and wider than the other. After careful dissection, I have always found it in the right, and never in the left bronchus. It will seldom be evacuated by sneezing, provoked artificially, by coughing, vomiting, or by inclination of the head forwards. Only by prompt opening of the larynx or the trachea can life be saved. All other means are fruitless. Its exact position can be rarely ascertained by percussion, in-
asmuch as it is constantly shifting to and fro during the first period after the accident, through the movements of respiration and cough.

5th. *The extraction of foreign bodies from the cavity of the mouth and gullet.*—Foreign bodies become fixed in the mouth only after having penetrated the mucous membrane, and are easily removed. When situated in the fauces or gullet, they create intolerable irritation, and eventually inflammation, if of a sharp or acrid description. Their immediate removal is therefore indispensable. Where there is a prospect of this being accomplished without operative interference, an endeavour may be made to provoke vomiting, by thrusting down the end of a feather, dipped in oil; if the patient has the power of swallowing, an emetic may be exhibited by the mouth, or, under urgent circumstances, injected into a vein. This treatment can apply only to small substances, for, if large and firmly impacted, the gullet may be ruptured. In all examinations with instruments, the tongue ought to be depressed to the utmost.

The body in question must either be withdrawn, or hurried into the stomach. The first course is the best, the last often dangerous. Venesection is occasionally indicated. Should everything fail, oesophagotomy is the sole alternative.

The substances which in the fauces are generally small and pointed, such as fish-bones and needles, most frequently the former. The patient being seated, is directed to gape and make a deep inspiration, whereby the velum is elevated, and the surgeon enabled to detect and extract the bone with a forceps. A lady, after eating some cake, suddenly shrieked with pain. I could perceive nothing about the neck, but, on carrying my forefinger to the back of the tongue, brought away a long thick bristle, which lay archwise across.

Foreign bodies observe, in their transit, certain *stations* at which they halt; thus, in the pharynx, behind the thyroid and cricoid cartilages, in the beginning of the gullet, or at its lower end, close to the diaphragm or cardia. They seldom stop at the middle of the gullet. If very large, they may cause suffocation; thus, a large piece of meat, a hard-boiled egg, a pear, a chestnut, have each proved fatal. Guattani witnessed the most frightful death ensue from a chestnut; the part of the gullet at which it stuck was gangrenous. Spiritus saw the same result follow the swallowing of a five-franc piece, which perforated the gullet above the cardiac orifice. Needles, inadvertently swallowed, pierce sometimes the gullet or stomach, advance by the aid of suppuration, or otherwise, towards the surface, and either escape spontaneously or through incision.
Lyson observed a case where three needles, that went in at the mouth, came out at the shoulder; I have known one issue at the arm.

The procedure must be modified according to the nature of the substance. None but a bungler would attempt to disgorge a piece of meat sticking at the cardiac opening, or urge on a fragment of glass from the gullet into the stomach. External pressure will suffice for potatoes or plums when stuck in the throat.

For the withdrawal of needles, fish-bones, and the like, there is no better implement than a large goose or swan quill-feather, with the barbed portion ruffled, and imbued with oil. The patient sits, with his head leaning upon the breast of an assistant, while the surgeon lowers the tongue, then introduces the feather, with its concave side downwards, into the throat, turns it rapidly round, and draws it out. The popular practice of swallowing a crust of bread is sometimes availing, but may also increase the peril when arrested above the bone. A sudden slap on the back is by no means a bad plan, when the substance is large and obtuse. It is preferable to that of setting the patient on his head, as was done in the instance of Mr. Brunel, to promote the expulsion of the half-sovereign piece.

The principal instruments employed for the present purpose are of the description of forceps. Dupuytren advises, as a preliminary step, the introduction of a gum elastic tube, surmounted with a silver ball, in order to ascertain the position of the foreign body. This, however, is superfluous, and will tend, moreover, to augment irritation. Cooper recommends the forceps of Weiss. The so-called leaden hammer of earlier writers consisted of a lead ball attached to a string, which was let down the throat, and pulled up again. Mesnier's lead hammer was of an olive shape; Petit's was equipped with a wire instead of a string. Petit used, besides, a metal noose fastened to a whalebone stem; Fabricius Hildanus, a many-holed silver tube, provided below with a sponge. The double ring of Graefe, attached to the end of a rod of whalebone, with a steel spring, is very convenient for taking pieces of money out of the throat. The customary instrument, termed répousseoir, or probang, namely, a bit of sponge, as big as a walnut, stuck to the end of a whalebone rod, is generally useful, either for entangling fish-bones and the like, or propelling large round substances. My own procedure is as follows; if the body be small and sharp, I employ the oiled feather, as above described. An oiled wax taper, passed down to the cardiac orifice, has proved serviceable; for, as soon as withdrawn, the body has been rejected. If the body be large, as a portion of flesh-meat
adherent to a fragment of bone, I use a lithotrite with an imperforate scoop, and rather straight. The instrument is introduced with the blades closed, until, it arrives at its destination, when these are to be separated sufficiently to grasp the substance, and, after a few gentle turns, withdrawn.

When there is impending suffocation, from the presence of very large bodies impacted in the throat, Habicot enjoins tracheotomy before resorting to opening the oesophagus. I have never been compelled to this extreme measure. The most difficult thing to deal with are sets of false teeth when swallowed. I once relieved an old lady in this predicament by means of my fingers. On several occasions, I have removed, with curved polypus-forceps, from three to four teeth attached to a gold plate, and which got accidentally into the throat; once, by the aid of an emetic, as a last resort, a seat of four teeth, very deeply located.

In all these operations, the patient is to be in a sitting posture, the head properly supported, the mouth rinsed with tepid water, tepid water mixed with white of egg taken as a drink, and the instrument smeared with white of egg rather than with oil.

6th. Of foreign bodies in the stomach and intestines. Foreign bodies may accumulate to enormous loads in the stomach before they endanger life. Fournier mentions a galley-slave who, after swallowing for years all sorts of extraneous substances, ultimately died of ileus. In his stomach were amassed twenty-eight bits of wood, a few small pewter spoons, several nails, buckles, weighing altogether one pound ten ounces. Bjerlander relates the instance of a man who swallowed a great many copper coins, a pocket-knife, and a steel for striking fire, all of which were, however, rejected. Needles, bones of fish, and of small poultry, are sometimes voided with impunity; at other times retained, perforate the tunics of the stomach or the intestines, and migrate towards the surface, the track which they permeate, being progressively closed as they advance. Small pointed bodies are found in the most unaccountable localities. Heim, the younger, records several instances of fragments of bone, grains of corn, and the like, which he detected in the appendix cæci vermiciformis. I once met with a fish-bone, half an inch long, in that situation, while examining the dead body of an aged female. I have not unfrequently seen fish bones and sharp osseous spicula discharged from fistulous openings about the verge of the anus, which had evidently perforated the rectum posteriorly to the sphincter, and given rise to fistula.

Leeches occasionally find their way into the stomach, and fasten themselves to its inner membrane. Numerous minute
Leeches were discovered in Egypt by Larrey in the stomachs of soldiers, who had died in consequence. When this happens, the patient ought to drink a quantity of strong solution of common salt to destroy the annelid, and afterwards an aperient dose of sulphate of magnesia to bring it away from the bowels.

When the substance remains, even after free vomiting has been induced, large quantities of white of egg ought to be administered either directly by the mouth or the stomach-pump, aided by clysters of the same, anodynes, venesection, and leeches. Should death not ensue, or the body not pass by the anus, nature, in some rare cases, favours its escape by the formation of abscess, and art by incision through the stomach or intestine.

7th. The extraction of foreign bodies from the rectum.—These have either traversed the whole intestinal canal, or originated from hardened feces in the rectum, or entered from without.

The most appropriate instruments for their removal, are bullet-forceps, polypus-forceps, small lithotomy-forceps, smooth blunt hooks of the breadth of the finger, and scoops with long handles. Before operating, the rectum is to be filled with gruel mixed with one-fourth of olive oil, in order to prevent its coats from getting into contact with the foreign substance, or damaged by the forceps. The patient is made to lean over the back of a chair and grasp its front edge, the buttocks being held apart by an assistant standing to the left side. The anus is then closed with the left hand, and the forceps, well oiled and shut, introduced by a gentle movement betwixt the fingers. The blades are next separated, carried upwards, and then approximated. The surgeon will soon be sensible whether he has secured the object of his search: if not, he directs the blades upwards and downward till he has; he then drags it out by a slight rotatory motion, as in the extraction of a stone during lithotomy. An irresistible call to stool seizes the patient, the liquid contents gush forth in a full stream, and at that moment the foreign body is evacuated. I have thus more than once taken away a mass of incrusted excrement which had been for years accumulating in the gut. I succeeded, by the aid of a silver spoon, in relieving an old gentleman throughly of an infirmity which had troubled him for a long period of time. He had previously been treated for stricture of the rectum by means of bougies, and once by dilatation through incision. He had annually resorted to Carlsbad to drink the waters, the radical evil having been overlooked. All loose stools uniformly swept by the incrusted feces. The extracted lumps possessed a calcareous crust, and were very voluminous.

Leber failed in removing, by the forceps, a piece of wood
one foot long, and one inch thick; he at length bored it through, and pulled it out. Marchetti extracted a dried sow's tail by passing some membrane over it, so as to hinder the short pickly bristles from irritating the mucous lining. Von Walther drew away with the forceps, from the rectum of a peasant, a piece of the root of a tree, which measured seven inches; Von Graefe, in like manner, the end of a stick; and myself a shoemaker's pliers from a lad.

Wherever the foreign body, either on account of its magnitude, or its being obliquely wedged in, cannot be got away without violence, it will be expedient to enlarge the orifice of the anus with a probe-pointed bistoury. In order to insure a clean incision, the left index-finger, smeared with oil, is to be inserted with the volar aspect towards the sacrum, as a guide for the knife, which is made to cut for about an inch in the direction of the *os coccygis*. This facilitates the extraction, and the wound readily heals under cold applications, and injections of gruel into the rectum.

8th. *The extraction of foreign bodies from the female parts of generation.*—For this purpose the surgeon may commonly use his fingers or a polypus-forceps; but if the foreign body be bulky and wedged in, then bullet or lithotomy-forceps and broad hooks. The patient being seated upon the edge of a table, facing the light, with the thighs held widely apart by two assistants, the surgeon squirts a little oil into the vagina, examines the nature of the body with the fingers and speculum, then passes up the forceps, previously oiled, gradually opens them, insinuating one blade behind the body, and finally withdraws it in the line of the pelvic axis. This is nowise difficult, when the body is not very irregular in shape, and the parts are not inflamed or swollen. Where, on the contrary, the vagina is contracted, and deprived of elasticity through inflammation and puriform secretion, and the substance large, it must be broken up into fragments and taken away piecemeal.

After its removal, the vagina ought to be well syringed, and the patient put into a warm bath. Mucilaginous decoctions may be subsequently injected, and the parts fomented with infusion of chamomile and Goulard lotion.

Foreign bodies in this situation are of every variety. If allowed to remain long, they determine inflammation, suppuration, and rupture of the vagina, either into the rectum or the bladder. Thus communication with these cavities, and effusion of their contents into the vagina, is the obvious result. Foreign bodies, if sharp and angular, occasion, now and then, dangerous lesions. I once had to remove from a young lady a number of different sized fragments of a porcelain urinal which
had broken under her. The labia were severely wounded, and the vagina completely filled with the shred. The hemorrhage was so excessive as to have caused fainting. I extracted the whole by means of a polypus-forceps, and inserted a few fine sutures. The wounds healed promptly. Large, incrusted, and firmly-adherent sponges were removed by me with lithotomy-forceps, as also a variety of full-sized wooden pessaries, all in like manner covered with a crust. Some of these I was obliged to break, using several forceps, with the aid of assistants, or else cut them in half with Liston's bone-scissors. Morand withdrew from a lady a silver pessary through the openings, in which bridles had shot across, and held it fast. Dupuytren extracted from a nymphomaniac a pomatum-pot; on another occasion, an old ring-pessary, which was wedged in, and caused most urgent symptoms. A girl introduced the cone of a pine into the vagina. The sharp imbricated scales got lodged in the mucous membrane, and were picked out one by one after the cone had been cut in pieces. The vagina was excessively turgid.

The remainder of this article devoted to the subject of “the removal of foreign bodies which have penetrated the textures,” will appear in our next number.

A Case of Foreign Body in the Windpipe. By John Popham, A. B., M. B.—(Dublin Journal.)

The subject of the present case was a little boy, named John Casey, aged 4, who was brought to the infirmary to be treated for supposed croup. His respiration was stridulous, voice hoarse and at times almost inaudible, and cough dry and hard, occurring in paroxysms, which threatened suffocation. During the fits of coughing, the inspirations, assumed a peculiar character, becoming shrill and whistling, not, however, so distinctly sonorous as in hooping-cough; the expirations were without any appreciable sound. When the paroxysms ceased, the child appeared comparatively free from distress, and the sharp sound of the inspirations became less audible, but did not quite lose the sibilant character. A circumstance which early attracted notice in the case was a want of accordance between the pectoral signs and constitutional symptoms. Thus, the child suffered very little pain, complaining chiefly of soreness at the hollow of the neck from constant coughing, the tongue was clean, the deglutition not affected, there was but little thirst or heat of skin, and the pulse ranged from 96 to 102 in
the intervals of cough; being slightly intermittent; the face, however, was pale, swollen, and anxious, the head thrown back, so as to extend the larynx; the jugular veins were turgid, and the child was particularly fidgety and restless. On remarking these circumstances to the mother, she stated that on the previous day the child had been seen playing with a little ring of brass,—an eyelet or stay-eye—which he said he had swallowed, but, from his extreme youth, she did not attach much importance to the child's assertion; she admitted, however, that the piece of brass had been sought for and could not be found. She also observed that a slight cough which the child had, became suddenly and alarmingly aggravated accompanied by a choking sensation so urgent that she took him to an apothecary in the neighbourhood, who told her that the child had quinsy, and administered an emetic with temporary relief. On examination of the chest, the sound on percussion was found everywhere normal. The respiratory murmur was heard distinctly in both lungs, and was not accompanied in the early stage of the case by any rhonchus; but, though perfectly vesicular all over the lungs, yet it was not as loud as is usually heard in a child of his age. There was no perceptible difference in the respiration of the right lung, as is observed to occur when a foreign body becomes impacted in the right bronchus or its subdivision. We could thus gather only the negative evidence that the bronchi were not directly obstructed, nor the parenchyma of the lungs inflamed. The examination of the larynx was less conclusive. It was difficult to apply the stethoscope to the short and uneven neck of the child, and he was constantly crying and shifting his position. We could, nevertheless, collect that no evidence of a moveable body existed either upon coughing or change of posture, even on inverting the child; the distress, however, produced by this position, was so great that we did not attempt to repeat it.

The diagnosis of the above case was embarrassing. We had, on the one side, the testimony of the little patient himself that he had swallowed the piece of brass, but so far dubious, that when he was pressed further, he got frightened, and denied all knowledge of it; we had also the sudden appearance of the suffocation cough and dyspnoea, and the paroxysms of great distress, alternating with intervals of comparative ease and remission of febrile symptoms; these circumstances, taken in combination with the existing physical signs, rendered the supposition of a foreign body in the windpipe extremely probable; on the other hand, cases of croup were at the time of almost daily occurrence at the infirmary, and, in the present instance, the signs of temporary or permanent pulmonary ob-
structure were absent. As, however, the evidence in favour of the presence of a foreign body in the air-tubes predominated—and the child, in such an event, incurred hourly risk of suffocation, if not relieved by an operation,—it was resolved to admit him into the hospital with the view of operating upon the first emergency. On explaining, however, to the friends the probability of the operation being required, they at once demurred, and even refused to allow the little patient into the infirmary, unless a pledge was given that no operation should be performed. Under these circumstances, nothing remained but to carry out the medical treatment, explaining to the parents the risk of failure; accordingly the trachea was freely leeched, and powders of calomel and ipecacuanha were given, with the apparent effect of improving all the symptoms, except the stridulous breathing. The cough lost much of its hard character, and its exacerbations were less frequent; the expectoration became more free, the only change in the respiration being the addition of slight bronchial murmurs. On the twenty-first day, from the date of the severe symptoms, the child—after a night of unusual dyspnea and spasmodic cough, while sitting up in his mother's arms, where, indeed, he had continued nearly all the time of his illness, from inability to lie in bed—brought up the piece of brass by a strong expiratory effort without cough. The little patient was the first to notice its escape. Upon examination of his chest a short time after, we found the stridulous breathing and signs of oppressed circulation gone, and the vesicular respiration decidedly louder over both lungs. In a few days all traces of irritation had disappeared, and the child in the month following passed through a severe attack of measles without any untoward result.

The piece of brass proved to be, as was suspected, one of those small rings, with a grooved edge and central orifice, used by stay-makers; it weighed three grains, and its diameter somewhat exceeded three-tenths of an inch, no doubt greater than that of a bronchus in so young a person. Hence, and from the absence of the physical signs of obstruction of the air passages of either lung, it seems almost certain that the substance was not impacted in any of the bronchi; that it was fixed seems probable, from the absence of pain and of the signs usually denoting the motion of a foreign body in the trachea; the weight of the brass and its sharp, jagged edges would also dispose to this result, but whether it was fixed in the trachea or in one of the ventricles of the larynx we can only conjecture. The central opening in the eyelet, by affording a facility for the transit of air, certainly lessened the danger which would be incurred from a solid body of equal diameter, and to
this was probably owing the feeble vesicular murmur heard equally in both lungs, as if from a cause common to both. Perhaps, also, the central orifice in the brass had some connexion with the whistling sound of the inspiration noticed above, similar to that which occurred in the case recorded by Professor Macnamara in the Dublin Hospital Reports, where a distinct musical note was produced from a perforated cherry-stone impacted transversely in a boy's larynx.

It is probable that the aggravation of the symptoms upon the night previous to the expectoration of the eyelet, was occasioned by the loosening or dislodgment of it. Certainly the happy escape of a body of dimensions so disproportionate to the opening of the glottis of a child of his age, is a lesson to us not to despair when, as in the present case, an operation, though strongly urged, will not be permitted.

PART III.

Monthly Periscope.

On the Physiological Anatomy of the Spleen. (Medical Times. American Journal.)—Dr. W. R. Sanders arrives at the following conclusions, which he gives at present without any details:—

I. The Malpighian glandulæ or sacculi, and the pulp of the spleen, constitute a true secreting apparatus.

A. The Malpighian sacculi are hollow, spherical membranous bags, completely closed, and filled with organized contents; they are attached to the trabeculæ by an arterial pedicle, and are imbedded in the pulp.

Saccular membranes.—The outer membrane of the sacculi is fibrous, and contains arterial remifications and numerous capillaries; their inner membrane is granular.

Saccular Contents.—On the inner surface of the membrane is applied a complete layer of nucleated cells; which are clear (not granular) of about 1-1200th inch diameter, and of a light yellowish colour, when not altered by the action of water. The rest of the interior of the sacculus is filled up by free corpuscles (containing nucleoli) of a light grayish colour, and of about 1-4000th inch diameter, corresponding precisely with the nuclei of the cells, and by a homogeneous or slightly granular plasma.

The perfection of the forms, the constancy and uniformity of appearance of these corpuscular elements, together with their reactions under water, acetic acid, &c., are extremely characteristic, so that they are easily and distinctly recognized. There is also evidence of the growth and maturation of the sacculi. This part, therefore, of the glandular anatomy of the spleen exhibits characters as perfect and as truly distinctive as the glandular elements of the liver, kidneys, salivary glands, &c.
The sacculus is the formative secreting organ, analogous to the acini of known secreting glands.

B. The splenic pulp consists, like the contents of the sacculi, of plasma and corpuscles; but the nucleated cells are extremely few, and mostly granular—hence the reason why they were not detected by observers who did not examine the sacculi apart from the pulp with sufficient care; the plasma is full of granules, which are distinct, and infinitely more abundant, than within the sacculi; and the corpuscles, instead of a regular uniform shape, are mostly angular, deformed, with great variety of shape and appearance, and breaking up into granules. These corpuscles are often, also, of a reddish colour; and, besides them, coloured semi-crystalline particles, of a deep red or yellow hue, and whose true relation is not yet perfectly made out, are found in the pulp.

The pulp is, therefore, that part of the glandular apparatus where the corpuscles of the spleen become disintegrated and dissolved into granules and plasma; and, if the sacculi are analogous to acini, it is probable that they burst and effuse their contents into the pulp, where they undergo degenerating changes, becoming thus fit for absorption: the pulp being a reservoir or duct, in which the secreted product is lodged for a time, and undergoes the ulterior changes of maturation and solution.

II. The veins are the absorbent elements of the spleen, and carry away its secretion.

This is rendered probable by their extraordinary number and size; by their abundant ramifications in the pulp (while the arteries are spread over the secreting sacculi); by evidence derived from the composition of the splenic venous blood, as shown in Béclard's recent comparative analysis of splenic and other venous blood (Archives Générales de Médecine, Oct., Nov., Dec., 1848); and by general analogy in the nature, functions, and relations of the portal circulation in the adult and in the foetus.

III. The blood circulation within the spleen is peculiar, but the peculiarities are not confined to the venous circulation, as has been generally supposed, but are common to it with the arterial. Its general principle is, "the sudden and immediate transition from very large to very small vessels," which renders the circuit of the blood-current extremely short. This general rule does away with all the minor differences of vascular distribution found in the spleens of man, the horse, dog, &c., compared with those of the sheep, bullock, &c.

The venous cells of the spleen, though, under certain circumstancs, an undoubted appearance, are entirely artificial, and always produced by methods of preparation, on which no reliance should be placed.

There is no satisfactory evidence that the lymphatics are the excretory ducts of the spleen; nor that its fibrous tunic or tabeculæ are muscular, or anything more than very elastic.

Conclusion.—The spleen is a true secreting gland; and its product, which is some organized or organized albuminous compound, is ab-
sorbed into the venous blood of the portal system, and contributes, but is not essential to nutrition.

The elements here mentioned are constant: they are easily made out in the spleens of the bullock, sheep, &c., when quite fresh. In the human spleen, they are in general less easily analyzed; but the microscope shows them to be identical, and, further, thus affords the means of recognizing and establishing the existence of the Malpighian sacculi, when (as not unfrequently happens in the human spleen) they are not visible to the naked eye, or, at least, not distinguishable from the pulp.

Cod Liver Oil in Phthisis.—The First Medical Report of the Hospital for Consumption and Diseases of the Chest, by the Physicians of the Institution. London. (American Journal.)—The earliest trials of this remedy, made on a large scale, were those instituted at the Brompton Hospital; where it has now been given in many hundred cases. The results of all these are not given, but its effects are shown in 542 cases.

Of these 542 cases, 293 were in the first stage of the disease, and 249 in the second and third, or those stages subsequent to softening. Of those in the first stage, 190 were males, and 103 females; 72 per cent. of the males, and 62 per cent. of the females, had their symptoms materially improved; in nearly 18 per cent. of the males, and in 28 per cent. of the females, the disease was arrested (the term arrest implies that all, or nearly all, the symptoms of the disease had disappeared, the patients felt themselves well, and able to pursue their ordinary occupations); in 10 per cent. of the males, and in nearly 10 per cent. of the females, the disease progressed unchecked. Of the 249 patients in the second stage of the disease, 139 were males, and 110 females; in 53 per cent. of the males, the symptoms were materially improved, and in nearly 61 per cent. of the females; in a little more than 14 per cent. of the males, and in nearly 14 per cent. of the females, the disease was arrested. In a little more than 32 per cent. of the males, and in 25½ per cent. of the females, the disease was not arrested. Viewing these results collectively, we find, in about 63 per cent., the symptoms improved; in 18 per cent., the disease was arrested; and in 19 per cent., it went on unchecked. When it is recollected that, of the whole number treated at this hospital, the disease was arrested in only 5 per cent., the value of this remedy, under the use of which the disease appears to have been arrested in 18 per cent. of the cases, must be considered very great.

Different qualities of oil were tried, without exhibiting any marked difference in their remedial effects; but the offensiveness of some of the darker kinds rendered their general use impracticable. The oil now used is straw-coloured, transparent, and free from offensive smell. Patients in general take it without repugnance. The dose, at first, is 1 drachm three times a-day, for an adult; but it is gradually increased, in some few cases, to 1½ oz. for a dose. It is usually administered in camphor-water, any aromatic water, bitter infusions, milk, or any
other agreeable fluid. When there is great irritability of stomach, it has been given in mucilage of gum with a few drops of hydrocyanic acid. In cases where there existed great anemia and debility, and in those where the effect of the oil seemed slight, preparations of quinine and iron, especially the iodide, have been conjoined with advantage. It has appeared advantageous to intermit its use for a few days, when nausea and feverishness, from whatever cause produced, are present. In certain cases, the use of the oil has been continued during the existence of slight hæmoptysis, without producing any injurious results.

Other animal oils (not derived from the liver), and vegetable oils, were tried with a view of ascertaining how far their operation resembled that of cod-liver oil. The experiments hitherto made have not shown them to possess the same powers; but they have not been as yet sufficiently often repeated to warrant decided conclusions.

One of the most striking effects of the use of cod liver oil is an increase in the patient's weight; with a view of showing the frequency with which this occurs, the gain or loss of weight was ascertained in 219 cases of consumption treated with the oil.

Taking both stages of the disease, and the sexes collectively, a gain of weight occurred in 70 per cent., a loss of weight in only 21 per cent., and in about 82 per cent. the weight remained stationary. The amount of the increase varied, being in some patients little more than one or two pounds during several months; whilst, in many, the average increase was from a pound to two pounds weekly, during several weeks. Some very remarkable instances of great increase of weight presented themselves—thus, in one instance, 41 pounds were gained in 16 weeks; in another, 19 1/2 pounds were gained in 23 days, and 10 pounds in the succeeding 10 days; in another case, 29 pounds were added to the patients weight in 31 days. It must be observed, that an amelioration of the symptoms did not invariably follow an increase of weight, though the exceptions were rare. An aggravation of the symptoms and a diminution of weight were almost invariable coincidences. In a few cases, the symptoms improved, though the weight remained stationary, or even became slightly diminished. In other cases, where the amelioration was still more considerable, and the progress of the disease appeared to have been stayed, relapse occurred, and was followed by a rapid progress to a fatal issue. That such cases do occur, requires to be remembered, in order to restrain too sanguine expectations, and to prevent the remedy from falling into the discredit which disappointment, after an unlimited confidence, may induce. On the other hand, without entering into a description of the successive steps of amelioration experienced by patients, it will suffice to say, that many of the cases included in the 18 per cent., in whom the disease is marked arrested, felt themselves as well as they had been before the attack of the disease.

From these facts, no other conclusion can be drawn than that cod liver oil possesses the property of controlling the symptoms of pulmonary consumption, if not of arresting the disease, to a greater extent than any other agent hitherto tried.
Treatment of Scarlatina. By Dr. G. W. Brown. (Medical Examiner.)—In the commencement of the epidemic I adopted the treatment usually recommended in the books, viz.: an emetic followed by calomel, pepper gargles, laxatives, diaphoretics, tepid sponging and counter-irritation, to the throat; but this I soon found to be lamentably deficient, for I lost fully one-half of my cases. About that time, in conversation with Dr. J. S. Capenter, of Pottsville, I was speaking of the fatal nature of the epidemic, and of the inefficiency of our present mode of treatment, when he suggested a strong solution of the nitrate of silver to the throat internally by means of a probang. I adopted it immediately, with the most happy results, in all of my cases. Of the last fifty cases treated by it, I scarce lost a patient. I sometimes used a strong solution of the sulphate of copper, especially where I desired to vomit the patient at the same time, as was often the case where the throat was filled with shreds of membrane, foetid matter, &c.; but I think the nit. argent. preferable in all cases. The strength of the solution was 3i. to the 3 of water. I applied the nit. arg. in all my cases as soon as I was called, whether there was ulceration or not, and repeated it once or twice daily till the patient was convalescent. In malignant cases I also used the chloride of soda internally, besides using it as a gargle, and I thought with decided benefit. Blisters, with few exceptions, did no good, but, on the contrary, I thought they did harm by increasing irritation. Liniments, particularly of iodine, answered better, especially where there was enlargement of the absorbent glands. My treatment then consisted in an emetic at the commencement, followed by calomel in doses of two or three grains every two hours till the bowels were freely moved; then laxatives, to keep up a gentle action on the bowels, sufficient to remove morbid secretions. A mixture of equal parts of the syrup of ipecac. and spir. nit. dulce., to keep a gentle action on the surface, and at any time that it was indicated, pushed sufficiently to produce full vomiting. Nit. arg. to the throat internally, once or twice daily, with gargles of the chloride of soda, and internal administration of the same, when indicated by malignant symptoms. Liniments to the neck, and tepid affusion to the whole body. Cool air and cold applications to the head in the shape of evaporating lotions, so long as the fever continued. I sometimes made use of venesection with decided benefit, but only in vigorous constitutions, and in the very early stage of the disease. Dropsy was treated by bleeding freely and purging, with diuretics and counter-irritation in the latter stages. Pericarditis was treated by the same means as the dropical effusion, only more promptly. Squill, nitre, digitalis and calomel, in combination, I found to be almost a specific in the second stage of pericarditis, especially if it purged freely.

Strychnine in Chorea. (L'Union Méd. Ranking's Abstract.)—M. Trosseau treats chorea by the use of a preparation of the sulphate of strychnine. Of this, they prepare a syrup in the proportion of four-fifths of a grain of strychnine to three ounces of simple syrup. In
children from six to twelve years of age, he commences with six tea-
spoonfuls during the day; in more advanced age, the dose is a desert-
spoonful six times a day. The doses are equivalent in the first case
to thirty, and in the second to fifty grammes of the syrup, twenty
grammes of which contain one-seventh of a grain of strychnine.
These doses were increased or diminished according to the effects
produced. Under the use of the remedy, a distinct rigidity of the
jaws, neck, and limbs is produced; but the author has found that
these physiological symptoms are the forerunners of the yielding of the
disease, and they therefore advise the continuance of the medicine
until they are induced.

Therapeutic Effects of Gamboge administered in large doses. (Gaz.
des Hop. Bul. Gén. de Thérap.)—Hitherto regarded as a drastic
purgative, gamboge has been recommended in dropsy, and classed by
the Italians among their contra-stimulants. We, in truth, know but
little in relation to its physiological and therapeutic effects. It has
been recently subjected to experimentation by M. Rayer, who, with-
out determining its precise mode of action, has established its good
effects in Bright’s disease. We now have new facts, published by
Dr. Abeille, physician of the Val-de-Grâce, which tend to demonstrate
that, like many other substances, this may be given in very large
doses, and be tolerated in certain cases so far as to lose entirely its
cathartic properties and to acquire new ones as the dose is increased.
We will subjoin, briefly, a few of these facts.

Case 1. A female, 40 years of age, had been eleven months affected
with ascites, which had resisted a great variety of means, and which
must have been connected with disease of the kidneys. She was
tapped; then subjected to mercurial frictions, to salivation, and the
internal use of gamboge, beginning with a dose of 30 centigrammes,
which was daily increased 1 decigramme, so that on the eighth day
the patient took 1 gramme. The first two doses provoked numerous
stools, attended with griping; as the doses were increased, the num-
ber of stools were diminished, and the griping ceased. When the dose
reached 80 centigrammes there were but two stools per day. During
the two first days the swelling of the inferior extremities disappeared,
but the collection in the peritoneal cavity was increased. From the
seventh to the eighteenth day the gamboge was carried to 14 deci-
grammes per day, which occasioned but one stool. From the sixteenth
to the eighteenth day, a real urinary crisis took place, upwards of
fifteen litres being evacuated in forty-eight hours, when the ascites en-
tirely disappeared.

Case 2. A young soldier entered the military hospital of Givet,
affected anasarca about ten days, and which M. Abeille attributes to the existence of pulmonary tubercles, and to a pericarditic effusion. A large blister was applied to the pericardium, and gamboge prescribed in increasing doses. The first doses, being from 30 to 40 centigrammes, produced brisk catharsis. As the dose was subsequently increased and tolerance established, the purgative effect diminished, and finally ceased. In eight days, the gamboge being perfectly tolerated in doses of 1 gramme was prescribed only every second day. On the fifteenth day, when the patient was taking 15 decigrammes per day, in broken doses, the urine became more abundant. From the fifteenth to the twenty-second day, the secretion of urine became so abundant, that on the last mentioned day the patient was reduced to a mere skeleton by the disappearance of the anasarca.

Case 3. This was a case of Bright's disease. Four issues by caustic potassa were established over the kidneys, and gamboge administered in increasing doses. On the fourth day the remedy was tolerated, the patient taking 80 centigrammes. The dose was increased gradually to 15 decigrammes. The secretion of urine became abundant, although still albuminous, and gradually lost its acidity and became alkaline. On the fifteenth day the ascites had disappeared, and the oedema of the legs was diminished. A repugnance to the gamboge compelled its suspension for three weeks, at the end of which time the ascites had returned with pain in the pericardial region—an effusion in the pericardium was detected. The gamboge was again administered in the same way, and a blister applied to the pericardium. The use of the gamboge was again attended with a disappearance of the ascites in seventeen or eighteen days. The urine was still albuminous, though but slightly so. The use of the gamboge was again suspended for a month, when it was resumed, the ascites having reappeared. This third time the gamboge provoked more griping and catharsis: it was never completely tolerated, the patient having of late two or three stools per day. The secretion of urine was, nevertheless, increased, and the ascites dissipated for the third time in twenty-one days.

Case 4. This was a case of ascites consequent upon hypertrophy and degeneration of the spleen. The patient had been several times tapped, and the peritonium would fill up again in a few days—the tappings, however, being made at intervals of two months or two and a half months. The patient was now put on the use of gamboge, which produced numerous stools during the first days. These diminished when the dose was carried to a gramme or more, and the
secretion of urine became more active than it had ever been. The abdomen remained three months without being much distended, and seven months elapsed before it was again necessary to resort to tapping.

If it be borne in mind that gamboge was never prescribed in doses exceeding from 6 to 12 grains, incorporated with some substance capable of mitigating its action lest it might give rise to serious gastro-intestinal irritations, it will be seen, not without surprise, that the dose has been carried as high as one gramme and a half, not only without producing emesis nor intestinal inflammation, but even with very little purgative effect. This is therefore one more fact in evidence of the modification which large doses produce upon the dynamic action of certain remedies, and which should lead us to class, in this respect, gamboge with tartarized antimony, nitrate of potash, &c. It will be remarked that the gamboge seems to exert its principal influence upon the kidneys. As to its therapeutic effects, we are led to believe that they are confined to the elimination of serous collections, without otherwise influencing the organic lesions which occasion these collections. But even if the effect of gamboge be thus restricted, it is still an important remedy, whose effect should be studied by further experiments to determine its real therapeutic value and degree of its tolerance.

Poisoning with Strychnia relieved by Chloroform.—A case of poisoning with strychnine in which chloroform was employed with advantage, has been communicated by Dr. Dresbach, in the February number of the Western Lancet. A servant, in the employment of Dr. D., mistaking a solution of strychnine for brandy, took three ounces of the strength of one grain to the ounce: twenty minutes after the ingestion of the poison, the whole muscular system was rigid; the muscles of the back and legs so rigidly contracted that it was with extreme difficulty the patient was able to walk; face drawn awry, and articulation extremely difficult; sense of burning about the stomach; tightness about the chest, with vertigo and dimness of vision; lower extremities cold, and perspiration flowing in a stream from the head and chest; pulse small and frequent, but regular. None of the ordinary antidotes being at hand, the chloroform was resorted to in the dose of two drachms. A few minutes after the administration of the medicine, the patient said that he felt its effects "to the end of his toe," and in less than fifteen minutes he was completely relieved of all symptoms of the poisoning. Although an isolated case like this is not
sufficient to establish the character of chloroform as an antidote to strychnine, the happy results in this instance, should lead to further trials in similar cases.

Conclusions of the Committee on Surgery in relation to Chloroform. (Trans. Amer. Med. Assoc.)—1st. The means of generally rendering patients insensible to the pain of surgical operations, so long a desideratum, have at length been furnished in the anaesthetic agents sulphuric ether, chloroform, and chloric ether.

2d. The employment of these agents for obviating pain in most severe surgical operations is now not only justifiable, but the imperative duty of surgeons; and, indeed, we may almost adopt the language of Prof. Miller, before the Medico-Chirurg. Soc. of Edinburgh, that “no one among his surgical friends, would deem himself justified, morally or professionally, in now operating upon a patient in a waking and sensitive state.”

3d. Of the anaesthetic agents, chloroform is decidedly the most efficient and facile of respiration; but, being most powerful, is, at the same time, most dangerous, when incautiously employed.

4th. In formidable and painful operations, chloroform not only obviates pain, but contributes to the safety of the patient, by preventing shock, and the irritation which is the antecedent, and to a certain extent, the cause of inflammation.

5th. The use of Chloroform is inadmissible in trivial cases, because the danger from its use is greater than that from the operation. All must admit that, of the two objects to be held in view in a surgical operation, safety and immunity from pain, the former is the more important.

6th. In regard to circumstances under which chloroform should be employed, we adopt the conclusions of the French Academy. “It should not be used when there exists any disease of the heart, any aneurism near the heart, any threatening dyspnoea, any tendency to engorgement of lungs or brain. Care must be taken that, during the inhalation, atmospheric air be sufficiently mixed with the vapour of chloroform, and that respiration be carried on freely. The inhalation should be suspended as soon as insensibility is obtained.”

7th. The best vehicle for the administration of chloroform or ether, is a handkerchief or sponge of loose texture, through which the atmosphere may be copiously inhaled.

Dr. Smith's mode of Reducing Dislocation of the Shoulder. (Ibid.)—Its peculiarity chiefly consists in the application of the counter-extension to the opposite wrist, extension being made from the wrist of the dislocated member. Steady traction from the two wrists, in the horizontal direction, will be observed immediately to erect the head, neck, and chest, and to restore the symmetry of the two sides of the body. This at once calls to our aid the action of numerous muscles. The object of counter-extension is, of course, to fix the scapula of the injured side. Traction from the opposite side most effectually does this,
first, by erecting the spine, which otherwise yields to the extension, and, more directly, by communicating support to it through the clavicles which in front fixed the two scapulae together, and behind through the muscles and tendons, which effect the same on the back. Support one scapula and you necessarily sustain the other.

We accomplish reduction, in many instances of dislocation into the axilla, by simple traction, for a few minutes, from the two wrists. In difficult cases we place the patient on a chair, pass a band (sheet or towel) over the top of the scapula and tie it beneath the chair. The knee of the surgeon is then placed in the axilla, and traction is made steadily from the two wrists, till the muscles are observed to yield, and the head to be disengaged. Then the surgeon directs the arm to be depressed, while at the same moment he urges his knee into the axilla by extending his foot. We have succeeded thus in cases of two months' standing, and where other methods in judicious hands have failed. Indeed, we now practice no other method.

**A new Operation superseding that of Removal of the Testicle.** By **CHARLES TAYLOR, Esq., Alfreton, Derbyshire.** (London Lancet.)—

The castration of animals is an operation which the interests and necessities of society require, and in the very earliest pages of human history, we read of the perpetration of the art; it becomes, therefore, no longer a question of premeditated cruelty, but a positive necessity, and which must be generally adopted, so long as man continues to be carnivorous. The epicure's dainty taste is satiated with the savoury flesh of the ox, while the capon forms one of the most exquisite dishes of the wealthy farmer. The horse, rejoicing in his strength, defying restraint in his search after females, is tamed down to the useful, docile, noble animal which we now use, and which forms an important means of commerce, business, or pleasure; but it is to be regretted that the operation which renders the horse subservient to our purposes, should be cruel in the extreme, and should not only deprive him of his sexual desires, but also of a great portion of strength and power of endurance, and should spoil his shape, rendering him, in comparison with our noble stallions, a sorry piece of horse-flesh; indeed, so undeniable is this fact, that the principal draymen in London employ stallions alone to transmit their burdens, regardless of the extra expense, care, and attention they require to restrain their penchant for the opposite sex. On studying the anatomy of the testicle and spermatic cord, it struck me that an operation might be performed, which would obviate the undesirable effects of the removal of so important an organ, and which would still destroy desire without affecting the seminal secretion, and by this means avoid depriving the animal of his masculine characteristics, which, unfortunately, is done by the present operation, I find that when sows in this neighbourhood, are what is popularly termed cut, the operation consists, not in the removal of the ovaries, but in simply dividing the Fallopian tubes, thus preventing sexual heat, which would otherwise come on in certain months of the year, and destroying, not only all desire, but all capability of procrea-
tion, without unsexing the animal. Now I humble opine that a similiar division of the vas deferens in the male would, on the same principle, deprive the animal of desire; and as the testicle would be still effectually nourished and retained in situ, it is fair to suppose that the semen would be secreted as before, and be taken up by the absorbents into the blood, by this means retaining all the masculine characteristics of the animal; but it may be averred by some, that this operation would not deprive the patient of sexual inclination. Allowing, as physiologists do, that desire is caused by the irritation of the semen in the vesiculae seminales, I believe that this operation would be quite as effectual as the total removal of the testicle; as it is a well acknowledged fact amongst horse-dealers and others, that a horse old enough for procreation will, after castration, have desire and power to impregnate one female with the semen which then fills the vesiculae seminales, though of course not more than one. This, I think, is a full proof that desire is created by the irritation of the semen, in the vesiculae seminales, and that division of the vas deferens would be quite as effectual, far less cruel, and attended with much better effects, than the ordinary removal of the testicle. Acting under this impression, I placed a dog under the influence of chloroform, dissected the vas with a ligature, removing an interspace of about three quarters of an inch; the animal recovered perfectly; the wounds healed by the first intention, and I took the first occasion that occurred to place him with a bitch in use, when his conduct plainly showed that all tendency to perpetuate his species was gone.

Preservation of Defective Teeth. (Boston Med. and Surg. Jour.)—Dr. Harwood, a dental operator of celebrity in Boston, is practising a method in regard to the management of diseased, sensitive, aching teeth, which promises to revolutionize the whole modern art and mystery of operative dentistry, while the benefit likely to accrue to those so unfortunate as to suffer from diseased teeth is of incalculable importance. The idea was first suggested by his partner, Dr. Parker. The old practice consisted, in regard to a carious tooth, too sensitive to bear gold filling at once, in destroying the vitality of the nerve by the application of arsenic, nitro-muriatic acid, or even the actual cautery by introducing into the cavity a red-hot wire. When that had been accomplished, pressure could be borne and the hollow completely occupied with gold. In that case, however, the tooth became, by the laws of chemistry, a foreign substance. It had no longer any vitalized connection with the living system, and consequently soon became partially if not wholly discarded, and gradually rose from the socket—nature never relaxing her efforts to throw off the dead material. To save the tooth, without severing its connection with the jaw, by the destruction of the nerve, was the ambition of Dr. Harwood. Those familiar with the anatomy of the region will appreciate the ingenuity and success of his plan. With a simply constructed instrument, the shape and use of which are no secret, the nerve is severed. Instantly the patient is relieved from the acute and distracting pain sometimes
characteristic of some kinds of pulp-exposed teeth. Having carefully removed every speck and point of decayed bone, the tooth is then plugged artistically, without the least disturbance to the patient. In the meanwhile a conservative principle is at work. The diseased upper and exposed surface of the nerve is divided from the healthy mass below; but little or no inflammation follows, the air being excluded, as in subcutaneous division of the tendons, and the wound speedily heals. Nourished, as it always had been, by the arteries at the roots, and the body of the tooth retaining all its original vital endowments, no discoloration ensues, and a tooth subjected to this truly philosophical treatment, may perhaps remain the most enduring and useful of any in the jaw through life.

We consider this a triumphant achievement of American dental science, deserving the marked consideration of dental surgeons, and the most extended publicity of the press.

Medical Miscellany.

Prof. Le Conte and Dr. Bennett Dowler.—The March number of the New York Journal of Medicine contains a letter from Prof. Le Conte, of the University of Georgia, asserting his claim to priority in the experiments, and the conclusions deduced from them, which have been published by Dr. Dowler in his "Contributions to Physiology." Prof. L. very justly expresses his surprise that Dr. Dowler should have made no allusion to these experiments in his recent article, more especially as Dr. D., in a review of Solly's work on the brain, published in the New Orleans Medical and Surgical Journal for July, 1848, quotes them in full, and acknowledges their physiological bearings.

Prof. Le Conte's experiments were published in the New York Journal of Medicine for November, 1845, in an article entitled "Experiments illustrating the seat of volition in the Alligator or Crocodilus Lucius of Cuvier."

The Bulletin Général de Thérapeutique states, that the French Government, acting upon the advice of the Council of health and of a special committee composed of savans and architects, has recently ordered the white oxide of zinc to be substituted for the white lead in painting the public buildings.

We omitted to notice in our last number the receipt of Ranking's semi-annual Abstract, richly laden, as usual, with the fruits of the labor of our transatlantic brethren. No one who desires to keep fully
“posted up” in European Medical literature, should be without this work, and Braithwaite’s Retrospect.

Medical College of Georgia.—The Annual Commencement of the Medical College of Georgia was held in this city on Tuesday, March 5th, 1850, on which occasion the degree of M. D. was conferred upon the Rev. Dr. Boring, now a missionary to California, and on Dr. Dudley W. Hammond. A very able and eloquent address to the Graduating Class was delivered by Dr. Miller, of Rome, and an interesting valedictory, by Dr. R. B. Nisbet, one of the graduating class.

The Class, during the course which has just terminated, numbered one hundred and seventy-nine.


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12 Fair days. Quantity of Rain 4 inches. Wind East of N. and S. 8 days. West of do. do. 14 days.

Another very disagreeable month; frequent changes and much wet weather. We have had but one fair Sunday during the winter.