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THE

Maritime Medical News,

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Founded in 1824, and organized as a Faculty of McGill University in 1829, this School has enjoyed, in an unusual degree, the confidence of the profession throughout Canada and the neighbouring States.

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The Primary subjects are now all taught practically as well as theoretically. For the department of Anatomy, besides a commodious and well-lighted dissecting-room, there is a special anatomical museum and a bone-room. The other branches are also provided with large laboratories for practical courses. There is a Physiological Laboratory, well stocked with modern apparatus; e Histological Laboratory, supplied with thirty-five miscroscopes; a Pharmacological Laboratory; a large Chemical Laboratory, capabla of accommodating 76 students at work at a time.

Besides these, there is a Pathological Laboratory, well adapted for its special work, and associated with it are two "culture', rooms, in which the various forms of Bacteria are cultivated and experiments on Bacteriologycarried on.

Recently extensive additions were made to the building and the old one entirely remodelled, so that besides the Laboratories, there are two large lecture-rooms capable of seating 300 students each, also a demonstrating-room for a smaller number. There is also a Library of over 10,000 volumes and a museum, as well as Reading-rooms for the students.

In the recent improvements that were made, the comfort of the students was also kept in view.

MATRICULATION.

Students from Ontario and Quebec are advised to pass the Matriculation Examination of the Medical Councils of their respective Provinces before entering upon their studies. Students from the United States and Maritme Provinces, unless they can produce a certificate of having passed a recognized Matriculation Examination, must present themselves or the Examination of the University, on the first Friday of October, or the last Friday of March.

HOSPITALS.

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Every candidate must be 21 years of age, have studied medicine during *four* six months' Winter Sessions, and *one* three months' Summer Session, one Session being at this School, and must pass the necessary examnations,

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CONTENTS.

PUERPERAL ECLAMPSIA.

BY C. J. FOX, M. D., *Pubnico, N. S.*

THIS is one of the most alarming of the accidents of pregnancy or confinement, and though not of very frequent occurrence, being stated by Rosenthal to occur in $\frac{1}{5}$% of all cases of pregnancy, and by Dr. Churchill in about $\frac{1}{3}$%, it is yet one which on account of the uncertainty of its appearance, the danger to life and the marked effect it has on friends and attendants, merits the careful attention of those whose business it is to assist woman in this, the supreme epoch of her life. The accoucheur, more especially, should be thoroughly prepared to meet every emergency. The bed of the parturient woman offers no chance to consult charts, the storm is upon him and without the necessary knowledge his charge may be lost.

While I may have nothing new to offer for your consideration, I take it as good service to bring forward the matter for the intelligent discussion which I am sure it will receive at your hands. In all the domain of obstetrics, there has perhaps been no subject upon which such diverse opinions have been entertained as in the one now under consideration. In regard to the origin of convulsions, theories have been advanced which are diametrically opposed to one another, and this by writers on both sides eminent in the profession and in medical literature. Such being the case, it may look like presumption to enter the field of discussion at all, but I shall be satisfied if I can give the appearance of harmony to what to the casual reader seems like a chaos of conflicting ideas.

One class of writers attributes convulsions entirely to central causes, another claims that they are purely and exclusively reflex in their origin, while a third recognizes the possibility of each of these being sufficient to bring about the undesired result.

In the first class we find Frerichs, who in 1851 claimed that puerperal eclampsia is only observed in those who have suffered during pregnancy from Bright's degeneration of the kidneys with the presence of carbonate of ammonia in the blood as a resultant of the decomposition of the urea.

Taking albuminuria as the precursor of uraemia, it would seem that we should meet with convulsions more frequently than we do, since Dr. Lautos reports having found albumen present in 60 per cent. of 600 newly delivered women, while the same writer met with a ratio of only one case of convulsions in 278 confinements.

It seems scarcely sufficient that in a given case we examine the urine, find albumen and absence of urea and behold we have the cause of convulsions when in fact the same condition exists in more than one half of all women confined. And further, may not the albumen found after a convulsion be considered as a result rather than cause; standing in the same relation to the attack as the albumen found after an epileptic fit?

While the vitiated condition of the blood as a part of albuminuria may, without doubt, produce a tendency to eclampsia which some immediate irritant precipitates into an attack, there are other poisonous agents in the blood at this time quite as capable at other times and under conditions of producing the same result. Dr. Hughlings Jackson advances the theory that convulsions in children are caused by the action on the brain of blood, which on account of embarrassed respiration has failed to become properly ærated, and in this condition a slight matter, such as a fit of coughing, may produce an explosion.

And just here I would suggest the analogy that may exist between the condition of the nervous system in childhood and the state of super-sensitiveness of the same in pregnancy. Assuming such to be

the case it is evident that we have in the puerperal condition a state of the blood, charged as it is with the excrementitious products of the foetus, calculated to produce irritation of the nerve centres, more especially if elimination on the part of the mother be from any cause interfered with.

May not the greater frequency of convulsions during labor be in some measure accounted for by the interference with respiration during the pains, increasing the amount of carbonic acid in the blood?

Thus much for the causes of centric origin, which arise as a result of the pregnant state; and while they no doubt account for the occurrence of a considerable number of cases, directly or indirectly, we cannot ignore the evidence furnished us pointing to the direct and unquestionable action of reflex causes; but while we cannot doubt the influence of these irritants, I wish to draw attention particularly to the fact that none of them in a normal condition of the system would, of themselves, be likely to produce eclampsia; that is, there must be a pre-existing state of nervous excitability, exaggerated as a result of the pregnant state. This is a circumstance that I think demands more attention than has generally been accorded it by authors, explaining as it may the fact that, under apparently the same conditions in other respects, such a large number escape compared with the few who suffer from eclampsia. Returning to the case of albuminuria, we have albumen present and even marked evidence of uraemia (as amaurosis with other nervous disturbances) without showing symptoms of convulsions; and, on the other hand, all imaginable reflex causes must be repeatedly present in innumerable patients who, however, escape eclampsia. In this fact we have an important indication for treatment, for while we may not feel inclined to question the influence of uraemic and other poisons in the blood or of the various reflex irritations, whether of the uterus, stomach, intestines or elsewhere, we have to take account not only of these, but of the accompanying condition of the nervous system which makes it possible for these to be operative. This I hold to be the bond of union underlying all the other conditions which have been considered as the more immediately concerned in the production of convulsions. It is a lessening of the power of resistance if you will, the consideration of which is important, because if we can remedy this it is a great gain being perhaps all that is needed, or giving time for the discovery and removal of the more immediately acting agents. I do not wish it to be understood that I would advocate paying exclusive attention to this feature of the case where the direct cause can be readily ascertained and as quickly removed; as in a case cited by Bedford where the convulsions were evidently due to the presence of a large quantity of plum cake and preserved quinces in the stomach; no albumen was present, and an emetic promply relieved the patient. This case offers an excellent example of the occurrence of convulsions from eccentric causes acting on an over excitable nervous condition. In this case even had albumen chanced to be present, it would have been no argument in favor of the uraemic theory.

It is not my object to speak of the means to be employed in the various cases of reflex origin. Of course the obvious indication that will suggest itself to all is the removal of the offending cause when that is possible; but my intention is rather the necessity for considering the nervous basis of the trouble, even when other more prominent factors claim our attention, not, however, in the sense of ignoring these.

In the view that I take of the treatment of convulsions we have two aims, one to remove the irritating cause, and the other to block the action of that cause or in other words, to lessen the impressibility of the nervous system. To meet the latter indication, I have, in a limited experience, found nothing to act more satisfactorily than chloral given in enema of 75 grs. or more. I prefer it in this way because of the difficulty of swallowing and on account of the probability of vomiting. I would also suggest the local anæsthetic action on the pelvic nerves as being an additional claim in its favor in this form.

Chloroform is indispensible where any operative interference is to be undertaken, but under other circumstances I should prefer chloral on account of its more continuous and lasting effect. A case that occurred in my practice in the fall of '87 may serve as a comparative test of the value of the two measures: Mrs. R., a primipara, 7 mos. pregnant, was found during the morning in her room insensible, and from that time till evening convulsions occurred at short intervals accompanied by vomiting in spite of bleeding, artificial delivery, and the almost constant use of chloroform. Finally I injected 75 grs. chloral into the rectum, when the fits yielded at once. I may say that, three days after, they returned when chloroform having been administered without avail they were again stopped by the use of chloral as before, after which they did not return and the patient made a good recovery physically, though there was for a long time considerable derangement of the mental faculties which, I believe, is not entirely recovered from at present. The child died in convulsions an hour or two after birth.

In another case, also a primipara, the labor, which was a favorable one, terminated in about 3 hours, and everything promised well until 2 hours after when convulsions occurred. In this case I did not use chloroform to the same extent, but on the first injection of chloral (sixty grains) they ceased, though in 17 days, after over exertion combined with costive bowels they returned. A moderate dose of morphia and a purgative was all that was used. There was no albumen present in the urine at this time, though I was unable to obtain a sample of the urine at the time of the first occurrence of the convulsions.

Of the immense hypodermic injections of morphia, 1½ grs, repeated in 2 hours, I have no experience and should feel rather conservative about venturing upon it, though it would seem that comparatively large doses would be required as compared with other

conditions in which morphia is indicated: but I know of no advantage which morphia can claim over chloral, either in certainty or rapidity of action, while it must suffer in comparison on account of its tendency to lock up the secretions and to produce cerebral congestion.

These three, chloral, chloroform, and opium, comprise the principal nerve sedatives of use in this affection. Bromide of potash may be used as an adjunct, though not of sufficient power to be depended on alone. In speaking of opium the mind naturally reverts to its old antagonist in the field, bloodletting. Of this I will only say that the weight of opinion seems to be that it should be reserved for those cases where the condition of the patient would indicate danger of cerebral hemorrhage.

When there is good reason to assume that the convulsions are of uraemic origin, in addition to the measures directed especially to the nervous system, we would simply use such means as would be appropriate in uraemia under other circumstances, the details of which I will not inflict upon you, except to refer to the preventive milk diet, which unfortunately in a country practice we are seldom in a position to apply as the patient is generally in labor or convulsions before our services are demanded.

Dr. Wm. Carter in Braithwaite for Jany. '87, says: "According to Bouchard one-fifth of the total toxicity of normal urines is due to poisonous products re-absorbed into the blood from the intestines and resulting from putrefactive changes which the residue of food undergoes there. If a healthy man is fed for a given length of time on an ordinary mixed diet, and then for an equal length of time on milk alone, the urine of the second period is much less poisonous to animals, when injected into their veins, than that of the first, hence the great value of milk as an article of diet for the Brightic."

The *Canada Lancet* for March, '89, publishes a table giving the comparative results of the various methods of treatment, which, taken as it stands, makes an excellent showing in favor of this plan, and, where applicable, it seems to be a most rational one.

NEUROSES AND OCULAR DEFECTS.

BY E. A. KIRKPATRICK, *New York.*

THE subject to which I am about to refer is alike interesting to the general practitioner, the neurologist, and the opthalmologist; a subject which, at the present time, is calling forth much attention from the medical men of this city.

I refer to the relations, real or apparent, existing between the oculo-motor muscles and various functional nervous manifestations, as well as to the operation of partial tenotomy of one or more of the ocular muscles when a condition of *heterophoria is associated with functional nervous disorders. It is held by those who believe that insufficiencies of the ocular muscles play an important role in the causation of functional nervous diseases, that the operation is justifiable, being in a large percentage of cases followed by good results.

In 1883, Dr. G. T. Stevens of New York, in presenting his "Memoir of Functional Nervous Affections" to the L'Académie Royale de Mèdicine, of Belgium, based conclusions upon observations in over three thousand cases of nervous diseases, conclusions stated in the following proposition:

"Difficulties attending the functions of accomodating and of adjusting the eyes in the act of vision, or irritations arising from the nerves involved in these processes, are among the most prolific sources of nervous disturbances, and more frequently than other conditions constitute a neuropathic tendency." This you will perceive is an extreme proposition, a proposition which, in its entirety, has many opponents and but few defenders. The author holds that the hereditary neuroses, such as neuralgia, chorea, insanity, migraine and epilepsy, are not transmitted directly from parent to child but that physical peculiarities are, of which the neuroses are but manifestations, and that among these peculiarities abnormal conditions of the eyes are among the most frequent and important. At the New York Neurological Society, held in the Academy of Medicine in March, 1887, Dr. Stevens read a paper on "Irritation arising from the visual apparatus considered as elements in the genesis of neuroses." The conclusions arrived at in that paper were based upon five thousand cases in private practice, besides a large number in public institutions, and were stated as had previously been done by the author in the above mentioned memoir. Several pairs of photographs of neurotic cases were exhibited, the first taken at the beginning of treatment, the second a month or more later, the latter showing remarkable changes in physiognomy, changes which were almost certain to follow after the relief of some distressing oculo-muscular tension. So said Dr. Stevens, who claimed a record of fifty per cent. of his epileptic and choreic cases treated by this method, remaining well for a length of time varying from many years down to a single year, and all being better without drugs than they previously had been with them. The drift of the discussion which followed and which was participated in by Drs. Seguin, Noyes, Roosa, Knapp, Gruening, and Ramney, was to the effect that regarding the etiology of the neuroses it was necessary to look far beyond exciting and superficial causes, to hereditary pre-dispositions and faulty tendencies, and that while an impaired optic or genital apparatus might aggravate, they could never stand in the place of essential causation.

Skepticism on the part of leading neurologists and ophthalmologists concerning the astounding benefits to be derived from the treatment of neurotic cases by the "Steven's method" or by partial tenotomies of the external ocular muscles, when a condition of

* A term used to designate a tending of the visual lines in a condition other than parallelism, a condition calling forth a greater expenditure of force to maintain binocular vision than when the muscles are in a state of perfect equilibrium.

marked insufficiency of some muscle or muscles may be present, led to the formation of a commission of investigation of which the following well known gentlemen were made members: Dr. E. C. Seguin, Dr. M. Allen Starr, Dr. David Webster, Dr. Charles L. Dana, Dr. W. Oliver Moore, Dr. W. R. Birdsall, and Dr. Frank P. Foster. The neurological members of this commission furnished Dr. Stevens with a number of epileptics and choreics upon whom he performed many tenotomies for the correction of their ocular defects and the cure of the epilepsy or choreaas the case might be. On Nov 5, 1889, after two years and a half, the commission brought in their report to the Neurological Society, which was to the effect that not a single cure had been made, though a few improvements were reported. After a very lengthy and detailed report by the commission, Dr. Stevens followed with one as complete in detail; and in many particulars, even in the same individual case gave a result totally different from that of the commission. He further claimed that the investigation had not been properly conducted, that unsuitable cases had been sent him, etc. A very protracted discussion followed, but led to nothing worthy of comment. Thus it will be seen that nothing very definite has come of the work of the commission, a work that was painstaking in the extreme and one that involved the expenditure of a great deal of time and labor. However, while no cures are reported, six cases were improved out of fourteen; therefore it is only fair to assume that Dr. Stevens' method is an auxiliary in the therapeutical treatment of epileptics and choreics, and although the result has not been so decisive as might be desired, yet it is sufficient to demand the attention and careful investigation of every practitioner.

Dr. David Webster has reported a large number of tenotomies for the correction of heterophoria with very gratifying results where persistent headaches, asthenopia, and such conditions were associated with a want of harmony in the movements of the ocular muscles He has told me personally of a large number, and I have seen quite a few where relief from some distressing symptom would follow the operation, when all other means had failed to benefit.

Every practitioner may make observations and investigations for himself, and it is a duty that he owes not only to the patient but to the profession that he should put forth every effort toward the solution of a problem which has for its aim the benefitting of so large a class of cases as those of the neuroses, cases which the general practitioner as well as the specialist, has ever to deal with, and the treatment of which is often highly unsatisfactory.

REFERENCE is made in the editorial columns to the injustice suffered by medical men when called upon to give evidence at the Supreme or County Courts. The different Medical Societies should we think take action upon this matter by passing resolutions embracing their opinions, which might then be transmitted through a proper channel to the local government.

ON THE TREATMENT OF GUNSHOT WOUNDS, TOGETHER WITH SOME REMARKS ON THE PROGRESS OF ANTISEPTICS.

BY R. RANDOLPH STEVENSON, M. D.,

Little River, Halifax Co., N. S. Formerly Surgeon in the Army of the Confederate States of America. Late Surgeon, (retired list,) of the 8th Colchester Regiment, N. S. M. Author of "The Southern Side."

THE following cases copied from my "Surgical Notes on Gunshot Wounds," together with the treatment and results, are selected from some of the numerous cases that came under my charge during the war.

These men were wounded in the battles around Atlanta, in the State of Georgia, and their cases are presented, to illustrate, to some extent, the great changes that have taken place in the surgical treatment of gunshot wounds in the last quarter of a century.

Case 9.—C. T. Shelah, corporal, 6th Regt., Kentucky Infantry, company "G." Vulnus sclopeticum. Minnie ball. Entrance styloid process of radius. Exit near articulation of radius with semi-lunar bone, injuring head of radius. Date, May 28th, 1864. Admitted to Hospital 3 days after injury. Treatment, lint and cold water dressing. Recovered.

Case 12.—F. York, private, 2nd Regt., Kentucky Infantry, company "G.," age 29, occupation farmer. Vulnus sclopeticum. Minnie ball. entrance lower third of ulna, ranging upwards and outwards. Exit near middle third of same. bone very much shattered. Date of wound, June 10th. Admitted to Hospital June 12th, 1864. Resection of injured portion of bone. Treatment, lint and cold water dressing, gangrenous fourth day after operation, requiring free application of Nitric acid and internal use of milk punch, iron, quinine, and full diet. Recovered.

Case 28.—J. A. Mapp, private, 8th Regiment, Mississippi Volunteers, company "B.," occupation farmer. (1st,) Vulnus sclopeticum. Minnie ball. July 22nd. Admitted to Hospital July 25th, 1864. Entrance near coracoid process, left shoulder, ranging downwards and outwards, fracturing spinous process of scapula. Exit near 6th dorsal vertebra; (2nd,) V S. At same time as above. Minnie ball. Entrance near instep, right foot, ranging upwards and outwards, injuring external malleolus of fibula. Spiculae of bone were removed. Treatment, lint and cold water dressing for both wounds, made rapid recovery, with slight anchylosis of shoulder and ankle joints.

Case 35.—J. W. Billings, private, 17th Regt., Alabama Infantry, age 52. Vulnus sclopeticum. Minnie ball. May 26th. Admitted to Hospital, June 3rd, 1864. Entrance, region of great trochanter, right side, ball ranging downwards and outwards. Exit, three inches from entrance, tendency of wound to gangrene, local application of strong Nitric acid, Turpentine one part, Bals Capaiba two parts, apply daily. Wound assumed healthy granulations after third day of treatment. Furloughed, June 25. Recovered.

Our Medical Schools in those days had no chair on "Bacteriology," nordid our great surgeons display magnificent and expensive spray products before their classes for the destruction of those deadly germs, that have in the last decade engaged so much attention.

Now we are taught that these life-destroying agents are everywhere present, on the instruments, sponges, hands, bed-clothes, etc., of the operator, countless numbers under

NOTICES OF MEDICAL JOURNALS:

From the Lancet Analytical Records.—"Fellows' Syrup contains the hypophosphites of iron, quinine, strychnia, manganese, lime and potash—the strychnia amounting in a dose of one drachm to one sixty-fourth of a grain. The preparation therefore includes a number of powerful nervine tonics. The reaction of the preparation is practically neutral—an advantage in many cases where the acid solutions of quinine and iron are objectionable or inadmissable. The compound is skilfully prepared, and the difficulties of keeping the remedies which it contains in solution, and in a form in which they are not liable to change, have been very successfully overcome."

his finger nails, in every drop of water; and to add to the safety of the patient the operator must pass through a purgatory of corrosive sublimate, carbolic acid, or some other germicide, before operating Pure air, pure water, a generous diet, (when it could be obtained,) plenty of soap, whisky, quinine, morphine, iodine, tincture of iron, nitric acid, and corrosive sublimate, were the principal agents that were employed in most cases that came under the care of the surgeons in the Army of the Confederate States, and taking everything into consideration, the percentage of recoveries under the simple treatment of "linen lint and cold water dressing" was as great as any other in pre-Listerian times.

My experience with antiseptics since the war in the States compels me to admit that "Listerism," as it is termed, has been the means of saving more lives, perhaps, than any other treatment in modern surgery. Notwithstanding this I claim that we have not yet arrived at the "survival of the fittest" agent for the destruction of Bacteria

Like all other arts and discoveries of modern times, each decade brings us some new remedy to counteract the deadly poisons that "human flesh is heir to." We find that the general introduction of fire-arms in the 16th century gave rise to the "theory" that gunshot wounds were "poisoned wounds," poisoned by the powder which was supposed to enter the track of the ball. This poison had to be destroyed, and boiling oil was the chosen method. Giovanni Vigo, an Italian surgeon, in his work on gunshot wounds, (in 1515,) was the expounder of this theory. This was the treatment which, (in 1536,) Ambrose Parè, as an army surgeon, followed; though shocked by the pain it inflicted, he did not dare to try a different method. Fortunately for suffering humanity, after a great battle, he had so many wounded that his oil gave out, he then made a salve of grease and turpentine, and with it dressed the balance of the wounds. He expected next morning to find these patients all dead, but to his astonishment they were infinately better off than those who had been tortured with the burning oil. This great reformer in surgery gave a deadly blow to the "boiling oil and poison theory" in his Paris edition, (1545,) "On the Treatment of Gunshot Wounds."

Medicine, we might say, like History, often repeats itself, for we find the same remedy, (turpentine,) used over three hundred years ago by Parè, being used for the wounded extensively in the late civil war between the States.

Lister, like Parè, was not the discoverer of any special "Germicide," but to use the phrase of one of his many admirers, "Listerism" is but a thoughtful application of strictly scientific pinciples to the ends of surgery.

Without entering into a lengthy discussion on "Listerism" I will remark that Pasteur, Tyndall, and others fully demonstrated that "organic matter placed in filtered or purified atmospheric air is kept free from all putrefactive changes," hence it would seem after all, that "Listerism" is only the application of those principles of antisepticity, demonstrated by scientists at various intervals from 1836 up to the present date.

Parenthetically I will remark that in the operation of ovariotomy, the power of antiseptics and germicides has been more faithfully tested than in any other operation within the realms of surgical science, and the results are that some of the most eminent ovariotomists of the present day now use irrigation with pure water in preference to solutions of carbolic acid, bichloride of mercury, etc. In fact the success of the father of ovariotomy, (Dr. McDowell of Kentucky, in 1809,) was almost as good without germicides or antiseptics, (if we except pure air and pure water,) as some of the operators of the present day, with all of the appliances for destroying bacteria. In this connection I would call the attention of my medical and surgical brethren to a preparation called "Listerine," a vegetable compound, manufactured by the "Lambert Pharmacal Company," of St. Louis, Missouri. It has passed a good clinical test by American surgeons in different part of the United States, as a dressing in surgical and gynaecological cases of every description. It is antiseptic, prophylactic deodorant, non-toxic, non-irritant, and non-escharotic, and as such strongly recommends itself to the medical profession wherever it has been introduced.

A great variety of antiseptics has been used since the day of Listerism. Turpentine, corrosive sublimate, carbolic acid, and iodoform have stood the test, I believe, better than all others. Iodoform has proved more successful in my hands as a surgical dressing in surgical cases than any other. According to Rhigini iodoform contains 96.47 per cent. of iodine, and is soluble in 200 parts of glycerin, in 25 parts chloroform, in 10 parts of spirits of turpentine, and in 6 parts of ether. The turpentine solution, (10 per cent.,) is the most destructive of any of the compounds of iodoform to bacterial life.

Like all other important remedies it has been applauded by some and denounced by others. In 1880, Mosetig, of Vienna, substituted iodoform for the "Listerian dressing." It then found its way into Bilroth's clinic, and from thence as a germicide was successful over most of the European countries.

In 1882, from the indiscriminate and careless use of iodoform, resulting in a number of deaths, and in a number of cases of "iodoform intoxication," it rapidly lost its great reputation as a surgical dressing; but Mosetig, one of its original advocates, persistently held on to it. The English surgeons in the Egyptian war also continued its use, and from that time until the present day it has steadily gained favor amongst the medical men of Europe and America. It must be remembered that it is not entirely free from danger, but if used as directed by Mosetig and other surgeons of note it is, (at least to the country practitioner,) the cheapest, safest, most efficient and beneficial of all the antiseptics that I have used up to the present date.

INFLUENZA.

INFLUENZA is no doubt rightly classed as "an acute contagious and epidemic febrile disease." Parkes finds evidences of epidemics in the ninth century. One of the first great epidemics of which much is known occurred in 1580 and over-ran all Europe.

In 1830 and '31 a severe epidemic swept over all the civilized countries of the globe. There has been no regularity in the recurrences of epidemics, which are mysteriously capricious, "The epidemic of 1847 in one month skipped from Spain to Newfoundland, and from New Zealand, to Valparaiso, Syria, Africa, and even to Hong Kong." London suffered a somewhat localized epidemic in Oct., '88.

ETIOLOGY.

Influenza is held by many to be caused by "unascertained *atmospheric conditions*." Breiner, (in Virchow's Handbuch,) thinks it is a miasmatic disease, caused by a living miasm. That the specific poison or irritant should prove to be an organism would seem to be most in harmony with our present knowledge. Its origin has no apparent relation to defective drainage. The rapidity, (*e. g.* two to

four years,) with which the disease can spread over the whole habitable globe is remarkable. It sometimes almost simultaneously affects immense numbers of a population. Europe has been traversed in six weeks by one epidemic, in six months by another.

Certain American authorities take care to emphasize the statement that influenza is not infectious or contagious. It is difficult to imagine what scientific confirmation they would offer of their views. Surely they only mean that innumerable cases occur which are not referable to contagion, there having been no exposure to infected persons. This only shows that the poison is widespread in the atmosphere, and attacks persons independently of contact with or proximity to previously infected cases. The diffusion of influenza in fresh localities from infected immigrants has been traced (Bristowe).

An analogy has been suggested in the relation between cold in the head and influenza, and that between summer diarrhœa and cholera. Influenza generally travels from east to west; it occurs in all seasons and climates. It attacks, sometimes, from 25 to 50 per cent. of the population; children are largely exempt. In a single locality the epidemic is rarely of more than two months duration.

PATHOLOGY.

Inflenza consists in a specific inflammation of especially the respiratory but sometimes also the gastro-intestinal mucous membrane; the mucous membrane of the nose, pharynx, larynx, trachea and bronchi being intensely hyperæmic as is that of the œsophagus stomach and upper intestine when the latter are implicated. Capillary bronchitis, croupous and catarrhal pneumonia, pleurisy and pulmonary oedema are occasional complications, (the first named not unfrequently,) and these are largely responsible for the mortality which is small, (about 2% in bad epidemics.) "Although the percentage of mortality is small, still from the large proportion of the population affected this small percentage does very largely augment the mortuary rate."

The above lesions seem hardly sufficient to explain the very marked constitutional depression and evidences of blood poisoning that characterize even the uncomplicated cases, and which are probably referable to unknown changes in the blood and nervous system.

The onset of influenza is very rapid and is ushered by chills, rigors, fever, marked depression, severe frontal headache, followed by the evidences of acute catarrh. The eyes get suffused and watery, the voice husky, and an abundant watery, (afterwards purulent,) secretion appears which tends to render less distressing the hitherto hard, dry, irritating cough. The catarrh usually reaches its height from the second to the fourth day. The rise in temperature may be sudden or gradual; it shows peculiarities at night. The pulse is usually over 90; though a temperature of 104 has been observed, and a feeble, irregular pulse of 120 per minute. Measles-like spots have often been seen about the palate. The auscultatory signs differ according to the degree of implication of the smaller bronchi, or the super-addition of pneumonia. With the bronchial catarrh alone sibilant and sonorous rales may be heard or the sounds may be dry and harsh. The constitutional nervous prostration is a most marked feature of the disease from the outset. There are commonly dull aching pains in the limbs. Sweating is often a critical phenomenon indicating the turning point of the disease, and is not generally present on the first day or two. With its occurrence sudamina not unfrequently appear. There are loss of appetite and associated gastric disturbance, and if the œsophagus and stomach become involved, as they appear sometimes to do, the gastric symptoms are aggravated, (nausea, vomiting and pronounced epigastric pains.) Though "it is probable that the accidental concurrence of influenza with other diseases explains a large proportion of the cases in which it is found associated with gastro-intestinal complications." Epistaxis otitis and jaundice are not unfrequent in the course of an attack of influenza, Delirium sometimes ensues. The lung complications will be detected by their physical signs, and the increased distress and depression caused.

The crisis in uncomplicated cases is usually reached on the 2nd to 4th day, after which convalescence is often rapidly, but sometimes slowly established. In some cases convalescence may not commence until as late as the tenth or twelfth day.

PROGNOSIS.

The old and debilitated run considerable risk, the young and healthy very little. Uncomplicated cases rarely result in death in the young and strong. Relapses are not unfrequent. Pregnant women are apt to abort.

TREATMENT.

Medicines are not of much value in Influenza; avoidance of cold, hot drinks, and some stimulants are the chief requisites. At the outset Bartholow recommends a full dose of quinine and morphia, (gr. xv.=gr. ½.) If the secretion is profuse a few drops of belladonna tincture may be given, or atropia combined with the above. Ipecac Wine and Laudanum are often useful. For frontal headache try the bromides; overcome constipation. Mustard plasters to the chest may give relief; continued hot water vapour inhalations undoubtedly do and this should not be forgotten. The food had better be mostly milk and farinacious substances. Avoid depletory and depressing measures; stimulants rather, will generally be called for.

The present epidemic, after travelling rapidly eastward through Southern Asia, quickly reached Europe, and early in December Berlin had hundreds of its inhabitants affected. New York's first cases were reported about Dec. 12th, and we may expect the epidemic in the Maritime Provinces immediately, if the first cases have not already occurred when this appears in print. It would seem that the North American continent has not suffered as severely from past epidemics as some of the European and Asiatic countries, so we might not be troubled very much by the present one after all.

It has been stated, also denied, that influenza has previously been a fore-runner of cholera. Happily it does not appear that this sequence is at all necessary or constant. It is so far gratifying that influenza entails temporary discomfort and inconvenience rather than death.

ARTHUR MORROW, M. B.

Authorities: Grainger Stewart's Lectures on Practice of Medicine, Bristowe, Parkes, Bartholow, Loomis, *Medical News, Medical Press, Brit. Med. Journal, &c.*

THE *Sanitary News* warns persons who bite off the ends of silk thread, of the danger of lead poisoning, as the silk is soaked in acetate of lead to increase the weight.

MR. ESTEY, manufacturer of Estey's codliver oil cream, has had occasion to enlarge his premises. Moncton is fortunate in possessing many enterprising men, and in Mr. Estey it possesses an enterprising druggist. We wish him continued success.

Society Proceedings.

ST. JOHN MEDICAL SOCIETY.

Regular meetings were held Dec. 4th and 18th.

At the former meeting Dr. MacAlpine read a paper on Small-pox. He gave a very careful review of some 400 cases under his own personal observation, at the Kings Co. Hospital, New York, and dwelt at length on the treatment of the above disease, carried out at that hospital. He also mentioned the difficulties which were experienced in the diagnosis of several of the cases.

At the latter meeting, held Dec. 18th, Dr. Inches gave an address on "Phlegmasia Dolens." He quoted 3 recent cases in his own personal experience, all severe and diagnosis difficult Many theories were advanced as to the real cause of the disease. Dr. Inches is of the opinion that the disease is not always due to septic absorption because it sometimes occurs before confinement, as well as during the second or third week after confinement, and because the left leg alone is nearly always affected. The subject was discussed by most of those present.

At the same meeting Dr. March read a paper, taking as his subject "The Physician and the Microscope." After the discourse, which was very interesting, Dr. March gave a practical demonstration on the use of the microscope, showing among other things, the pneumococcus, gonococcus, bacterium tuberculosis, comma bacillus, &c. The instrument used was an Acme, No. 5, made by Queen & Co., of Philadelphia.

F. G. ESSON, *Sec'y.*

Selections.

THE CARTWRIGHT LECTURES ON VITAL AND MEDICAL STATISTICS,

Delivered before the Alumni Association of the College of Physicians and Surgeons, New York, Nov. 14th, 20th and 22nd, 1889,

BY JOHN S. BILLINGS, M. D., LL.D., *U. S. Army.*

(These lectures by one peculiarly able, by reason of his official position and his personal talents, to deal authoritatively and exhaustively with the subject, are of so great interest and value that we purpose placing an abstract before our readers. We wish to preserve their completeness as far as space will allow, so we propose to give only an instalment of the abstract in this issue and to continue it in our next.

The most of the article will be a reprint from the *New York Medical Journal,* We are the more desirous of presenting it as it is a subject of which most medical men have not the detailed understanding that we believe they would like to have.—*Ed.*)

LECTURE I (ABSTRACT.)

I PURPOSE in these lectures to speak of vital and medical statistics, and of some of their relations to each other and to scientific and practical medicine and sanitation. The discussion will include such points as character of the data required; methods of obtaining them by the census, by registration, and in other ways; relations of physicians to this kind of work; methods of compilation and forms of publication; the best existing sources of such data; and some of the more common fallacies in drawing conclusions from the data as ordinarily published.

These and other points will be considered in their practical application to certain questions which, I hope, may be of interest to you, both as citizens and as physicians, as for example: Is the average longevity of man in civilized countries increasing? What data are required to practically judge of the relative healthfulness of different localities, or of the same locality at different times? What are the relations of certain forms of disease to race, to climate, to locality, to occupation? What is the relative tendency to increase of population in this country in the white and colored races? What is the statistical evidence with regard to improvement in practical therapeutics as arrived at from hospital data, from death rates in obstetric practice, etc.?

Statistics and discussions of statistical methods are, as a rule, dry and uninteresting subjects, and it is with very considerable doubt and hesitation that such a topic has been selected for these lectures. I have no new discoveries to announce, and those who are practically familiar with statistical research will find some of my statements rather elementary; but the subject is not one which lies within the ordinary range of medical studies, the data are widely scattered in literature, and I hope, at least, to be able to remind you of some of the numerous points which you may have once known, but which may have been forgotten owing to the pressure of other studies and duties.

Statistics are somewhat like old medical journals, or like revolvers in newly opened mining districts. Most men rarely use them, and find it troublesome to preserve them so as to have them easy of access; but when they do want them they want them badly.

There are many fallacies and errors connected with vital and medical statistics as ordinarily collected and used, and it is highly desirable that the physician should be aware of the more important of these, since he is constantly appealed to for decisions as to their true significance and value. "It is as easy to tell lies with figures as with words, and bigger ones"; but while we occasionally meet with deliberate falsifications of the records, made for the purpose of magnifying or diminishing the apparent mortality or prevalence of a particular disease in a given locality, or to maintain an anti-vaccination thesis, these are not so frequent as are the errors of involuntary misstatement and misinterpretation into which those not familiar with methods of collecting and tabulating statistics are so liable to fall. Those who are not familiar with the methods of obtaining and compiling statistics of this kind are apt to be unduly credulous or unreasonably skeptical as to their real use and value—to use the first figures which come to hand, and thence derive conclusions which are not warranted, or to reject the plain teaching of carefully compiled statistics in favor of general assertions which have no firm foundation, but which are in accord with preconceived opinions. My experience with those seeking statistical data is that the majority begin by looking for those data which are in favor of some particular conclusion with which they commence, rather than by selecting data with reference to their probable completeness and accuracy, and accepting the conclusions which may be legitimately drawn from them, whatever they may be.

Those who are engaged in the collection and compilation of official mortality and vital statistics are often at first the most skeptical as to their accuracy and utility, for their attention is so frequently and forcibly drawn to errors in the

individual data that they conclude that the whole mass is unreliable; and the difficulties in the way of obtaining complete and reliable figures are seen to be so great that they incline to give up the whole matter in despair. Continued study of the subject, however, shows that many valuable conclusions or suggestions can be derived from imperfect data, and that in large masses of figures the errors either tend to neutralize each other, or to produce a constant effect in one direction which can be calculated and allowed for, so that those who have had the greatest experience are most convinced of their value. It is true that, in statistics, the inferences can not be more accurate than the data on which they are founded, but we do not look for scientific exactness from them so much as for an estimate of probabilities.

In the *experimental* method of advancing our knowledge of the laws of human life and disease, we seek to make a direct test of the variation of one particular condition, or set of conditions, upon the living organism, all other conditions being kept uniform as far as possible. Some such experiments can be made on man, but the greatest number of the problems which we may hope to solve by this method, and among these the most important, can only be approached by experiments on the lower animals. Within the last twenty years experimental physiology and pathology have made great advances, and these methods, so far as they are applicable, give more definite results, and are more immediately satisfactory, than those derived from comparison of observations in which no definite experimental variations have been made; but so far as regards causes of disease, or the action of supposed methods of prevention, or of remedies, it is unfortunately the case that we can not draw accurate conclusions as to what will happen in man from what is observed to happen in animals. In the first place, there are many forms of disease in man, and those among the most important, as regards the suffering and loss of productive power and of life which they produce, which can not, with our present knowledge, be experimentally produced in animals, and which rarely or never occur in them.

For example: Yellow fever is a disease which, from analogy, we have reason to believe may be due to the action of one or more specific micro-organisms, or, perhaps, I should say, to the products of such organisms. We find a dozen different kinds of bacteria in persons suffering from yellow fever, and by dint of much labor, these have been isolated and cultivated outside the human body. The problem is to determine positively, and with scientific precision, which, if any, of these is the true, essential cause of the disease. The mode of doing this is by producing the disease in a perfectly healthy person or animal by the inoculation of the suspected organism. But, thus far, we have failed to find any animal in which a disease, which can be considered as specifically identical with yellow fever, can be produced by any method; and I need hardly tell you that inoculations of such a disease as this in a human subject, under conditions which would make the results of such inoculation scientifically trustworthy, are impracticable and unjustifiable.

Those forms of disease which are common to animals and man—such, for instance, as anthrax, tuberculosis, tetanus, hydrophobia, the ordinary forms of suppuration, and also typhoid fever—are being pretty thoroughly worked out by means of such experimental inoculations as I have just referred to; and we are able to say, with a great degree of precision, not only that these diseases are due to specific forms of bacteria, but to determine enough of the characteristics of these forms to be able to identify them wherever they are found.

The method of *observation* may, for our purposes, be again divided into two categories. The first is that which is used in individual cases, being the form applied by the physician to each case which he has to treat. It also includes the sort of investigation which may be made in a single household, a small community, or a thinly populated district, to determine the course and cause of a particular form of endemic or epidemic disease, where the conditions affecting each family or dwelling can be studied in detail somewhat as the detective of modern fiction follows his clews. By the combination and comparison of detailed studies of this kind the greater part of our present system of diagnosis, prognosis, and therapeutics have been evolved; but it has been and will be a slow process, for each man differs from every other man in structure and mode of function, and the conditions of the environment are so multiform, and so variable in space and time, that "experience is doubtful, and judgment difficult." We must therefore try to supplement the information thus obtained by that derived from the second kind of observation above referred to—namely, that of collecting a few data with regard to great numbers of people, especially where these are accumulated in thickly settled localities, forming what is called the statistical method as applied to different communities. By the first method we compare individual with individual, and do so with considerable minuteness of subdivision of the conditions studied; by the second method we compare the vital phenomena of communities with those of other communities, but only on broad lines and in relation to circumstances easily noted.

The essential data of vital statistics are derived from enumerations of the living population and from records of births, marriages, and deaths. The numbering of the people is effected by a census, a term derived from the Roman Censors, a part of whose duty was to make such counts. Such enumerations were made by Moses (1490 B. C.), David (1017 B. C.); in Greece, 650 B. C.; and in Rome, beginning 566 B. C. They were probably made also in Assyria, but the Assad records have not yet been found. In modern times the first country to make a count was Sweden, in 1749. The first census in the United States was taken in 1790, as a necessary means of carrying out the constitutional provision that the basis of representation for the several States should be the number of the population in each. The first census in England was taken in 1801, and showed the number of persons, with distinction of sex, the number of houses, the number of families, and a rough statement of occupations under the general classification of agriculture, trade, manufactures or handicraft, and all others.

* * * * * * * *

Dr. Billings next refers to the fields of study in vital statistics having for their object to determine the relation of race and color to birth-rate, to certain forms of disease, or to the liability of death at certain ages. These are important as answering such questions as: Is the negro population of the Southern States increasing faster than the white?

* * * * * * * *

The influence of race upon mortality is especially manifest in the death-rates of cancer. The number of deaths from cancer per 100,000 population in certain portions of the United States, with distinction of white and colored, was as follows: White, 27·96; colored, 12·67.

In the northern part of the United States the proportion

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Dose.—1 to 3 Pills.

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Ext. Nuc. Vomica, 1 gr.

DOSE.—1 to 3 Pills.

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Medicinal properties—Antiperiodic, Alterative. Dose, 1 to 2.

Aconitia,.....1-60 gr.
Med. prop.—Nerve Sedative. Dose, 1 to 2

Aloin et Strychnine,.....
Med. prop —Tonic, Laxative. Dose, 1 to 2.

Aloin et Strych. et Bellad.....
Med. prop.—Tonic, Laxative. Dose, 1 to 2.
Aloin, 1-5 gr.
Strychnine, 1-60 gr.
Ext. Belladon. ⅛ gr

Atropine,.....1-100 gr.
Med. prop.—Anodyne. Dose, 1 to 2.

Atropinæ Sulph......1-60 gr.
Med. prop.—Anodyne. Dose, 1 to 2.

Caulophyllin,.....1-10 gr.
Med prop.—Emmenagogue. Dose, 1 to 4

Codeia,.....¼ gr.
Med. prop.—Anodyne, replacing Morphia without the usual disagreeable after effects produced by the latter.

Corrosive Sublimate, 1-12, 1-20, 1-40 and 1-100 gr.....
Med. prop.—Mercurial Alterative. Dose, 1 to 2.

Digitalin,.....1-60 gr.
Med. prop.—Arterial Sedative. Dose, 1 to 2.

Elaterium, (Clutterbuck's) 1-10 gr.
Med. prop.—Diuretic, Hydragogue Cathartic. Dose, 1 to 2.

Ext. Belladonna, (English.) ¼ gr.
Med. prop.—Anodyne. Dose, 1 to 2.

Ext. Ignatia Amara,.....½ gr.
Med. prop.-Nerve Sedative. Dose, 1 to 2

Ext. Cannabis Indica,.....¼ gr.
Med. prop.—Anodyne. Dose, 1 to 4.

Ext. Hyoscyam. (English.) ¼ gr.
Med. prop.—Nerve Stimulant. Dose, 1 to 3.

Ext. Nuc. Vomicæ,....¼ and ½ gr.
Med. prop.—Nerve Stimulant. Dose, 1 to 3.

Gelsemin,.....¼ gr.
Med. prop.—Emetic, Diuretic, Cathartic, Dose, 1 to 2.

Hyoscyamia,.....1-100 gr.
(Crystals Pure Alkaloid.)
Med. prop.—Anodyne, Soporific.

Leptandrin,.....¼ gr.
Med. prop.—Cathartic. Dose, 1 to 4.

Mercury Prot. Iodid......¼ gr.
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Morphinæ Sulph......1-10 gr.
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Med. prop.—Anodyne. Dose, 1 to 2.

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of deaths from cancer in proportion to one thousand deaths from known causes, with distinction of white, colored, Irish, and German parentage, was as follows: White, 19·1; colored, 7·8; Irish parentage, 24·2; German parentage, 25·8.

It will be seen from these that the liability to death from cancer is not half as great among the colored people as it is among the whites, and that there is a greater tendancy to death from cancer in persons of German parentage than in all the average white population, especially between the ages of fifteen and sixty-five.

The relation of race to vital phenomena in general, and to diseases and death-rates in particular, form one of the most interesting branches of what Galton calls the "science of heredity," but it is a branch in which little progress has yet been made, and for the study of which the United States offers greater opportunites than any other country. "The question of race influence is not merely an abstract matter fitted only for well-rounded periods in the discussions of the schools, but it profoundly affects vital and national life." It is a force which acts incessantly upon and menaces us, and, so far as we can now see, it is mainly upon the outcome of the distribution and prevalence of race that depend civilization, religion, and the future of man upon this earth. "In so far as the conditions of things tend to preserve the best types, progress is favored. In so far as they tend to destroy or to debase them with inferior types, progress is hindered. Not even mixture of race prevails, or persists, but there has been a certain amount of mixture wherever there has been progress in human affairs. Such mixture appears to have been a consequence rather than a cause, yet it may become an important secondary cause in changing or modifying the course of human events."

The census gives us a view of the population on a certain day, and, if well taken and properly compiled, it gives a general view of the stream of life as it flows on that day, with its variations of breadth and depth, from which it is possible to calculate, within certain limits, the velocity of the current, the rapidity of change, and the probable rate of increase or decrease, especially if comparisons can be made with the results of a previous census taken in the same way. It may also indicate periods of wide-spread disaster or of migration.

In general, we may say that the census indicates the state of the population at a given period. Vital statistics, however, consider both the state and the movement of the population, and therefore for these we may have something more than the census, viz., a record of the deaths and births occurring in successive periods, from which we can compute mortality and natality rates.

Mortality, or mortality rate, refers to a ratio between the number of deaths occurring and the number of living population furnishing those deaths. It is to be distinguished from a statement of the number of deaths, since to determine the mortality in a given population, we must not only know the number of deaths, but also the population furnishing that number. $M = \frac{D}{P}$. In the same way, natality does not mean the number of births, but it means the ratio of the number of births to the population in which they occur. $N = \frac{B}{P}$.

The relations between mortality and natality are very important, as I shall have occasion to explain hereafter. The value of such statistics depends, of course, on the accuracy of the individual data, and the completeness with which these data are gathered for the given locality to which they relate.

Accurate data with regard to deaths can only be obtained by a system of registration of deaths made at the time they occur. Repeated experience has shown that it is utterly impossible to collect, at the end of a year, by any mechanism of enumeration, more than seventy per cent. of the deaths which have occurred during the preceding year, and it is now well recognized that a complete registration of deaths can only be secured by legislation which forbids a burial until a permit has been granted from a central office, which permit is issued only on the certificate of a physician, setting forth the cause of death and other facts connected with it which are of importance, and which will be presently referred to. In the great majority of cases it is comparatively easy to enforce the law, even in thinly settled rural districts, and the community soon learns to consider any attempt at burial without a permit as a suspicious circumstance, indicating a desire to conceal either the death or the cause of death, and justifying a special investigation by the authorities. When it has been decided to require a burial permit in all cases, it is not usually difficult to require the data for registration as an indispensable preliminary to the issuing of such permit.

Any system which depends upon the returns of undertakers for a record of deaths, gives incomplete and unsatisfactory results. It is only where the permit must be obtained before burial and the certificate must be filled at a central office before the permit is issued, that a complete record of all deaths will be obtained. Any complete system of death registration should include some method of verification of the death and of its cause, which must be certified to by some person having the special knowledge which alone can enable him to give such a certificate.

In the first place, we must have this verification to insure the fact of a death having taken place. In its absence, in a large city, there is little or no difficulty in having recorded the death of a person who may be either alive and well, or non-existent, and the door is thus opened to frauds of various kinds, some of which have actually been attempted and discovered, while others, no doubt, have been successful and remain still unknown. Such verification is also necessary to insure the fact of real as opposed to apparent death in any case, and thus prevent premature burial.

The utility for this latter purpose is, of course, small, for the popular idea as to the frequency of trance or other conditions simulating death, so that the true state of affairs is not detected, is, as you all know, grossly exaggerated. Nevertheless, this consideration may enter as a factor into an argument in favor of such skilled verification. The main reason, however, for the verification of a death by expert testimony as to its cause, is that it is necessary to establish the fact that a death has taken place from what may be called natural causes as opposed to criminal causes.

This verification of death and of the causes of death may be made either by physicians employed for that particular purpose and paid by the state, or by the physician under whose charge the deceased person has been immediately previous to death; in which latter case only those cases which have not been under the treatment of a physician are referred to a public medical officer, or the coroner, for verification and determination of the cause of death.

The first system is that which is employed in France, Austria, and Belgium. The second is the one made use of in England and in this country.

All registration laws include the certificates of physicians as an essential part of their machinery. Some do this

directly, requiring that physicians shall keep a list of all deaths occurring in their practice, and shall forward this list at stated times to the registrar. This method has invariably proved to be a failure, as has also the similar attempt to require of clergymen that they shal furnish lists of the marriages which they have solemnized. It is utterly impossible to enforce such laws unde penalties, and not fifty per cent. of either clergymen or physicians will carry out their requirements under ordinary circumstances.

Where burial permits are required, a physician may be made responsible for a certificate as to those matters only with regard to which his special professional knowledge is necessary—such as the cause of death, duration of sickues, etc.; or he may be required also to certify as to the age, birthplace, parentage, occupation, etc. The great majority of physicians accept without hesitation the data furnished on these points by some member of the family, or whatever appears set down in the form of certificate brought to them by the undertaker for signature. But there are always physicians who question the propriety of the law and object to certifiying to that of which they can have no personal knowledge, while some few may possibly decline.

The requirements of a registration law impose upon medical men who sign certificates as to causes of death a very considerable responsibility—much more considerable, in fact, than many of them probably realize. The physician is to consider whether his knowledge of the case is sufficient to enable him to determine whether or not the death was due to what are called natural causes, whether there is reason to suspect that violence, poisoning, criminal neglect, etc., may have been more or less factors in the result, and whether any certificate as to the nature of the cause is justifiable. The pressure upon the medical man to certify to more, or sometimes less, than he knows, is occasionally very strong, but the only course in doubtful cases is to indicate clearly what one knows, as distinguished from what he merely believes on the faith of statements made by others. In ordinary matters of daily routine occurrence, in which there is no apparent motive for falsification, we constantly do, and must, accept the statements of others; the physician acts as the primary judge of the evidence submitted by relations and friends as to the time of death, the age and race of the decedent, the duration of the disease, etc., and is justified in certifying to his belief in the evidence, very much as he is justified in certifying to the date of his own birth.

There is no good reason why reports of births should be required from medical men. But, as regards reports of deaths, it is to the interest of properly qualified members of the medical profession that such certificates should be demanded from them. Whenever and wherever certificates as to the cause of death are required from physicians, there must also be established some system of determining who are physicians within the intent of the law.

At first it may be necessary to accept certificates from any one and every one who chooses to call him or herself a physician; but the character of some of the documents of this kind which will come in will very soon indicate the necessity for some discrimination. Thus it is that the certification of the causes of death by physicians is the essential foundation, and it is the only essential foundation, of legislation with regard to the qualifications which the state has a right to demand from practitioners of medicine.

The registration of marriages, births, and deaths is important to the individual, because it gives him increased security in his rights to property and to life by enabling him to furnish proof of parentage and legitimacy, by increasing the chance of detection of fraudulent claimants to property of which he is the true heir, and by discouraging criminal attempts to shorten his life owing to the fact that evidence must be furnished that death was due to natural causes, or a special legal investigation of the circumstances will be made. Of the importance to the community as a means of protection of health and life, and to scientific men and physicians as a means of investigation of some of their problems I need give no proof to this audience.

We can hardly be said to have a complete system of registration of births in any State or city in the country. Probably the city of Providence, R. I., has the most complete records of this kind of any of our cities. As regards the registration of deaths, Massachusetts, New Jersey, the greater part of Connecticut and New York, a large part of Alabama and Minnesota, and most of our large cities, have now a fairly satisfactory system and complete record. For the rest of the United States, there is either no system of registration, or, if any exists, it is a very imperfect and incomplete one, the results of which cannot be depended upon, and which cannot be compared with the results obtained in the localities above referred to as having a complete system; and the only means which we have of estimating the mortality of these localities is by the reports of deaths for the preceding year collected by the census enumerators.

It is for this reason that the decennial United States Census is a matter of such great importance to scientific medicine and to practical sanitation—of much greater importance, in fact, than most physicians and health officials seem to fully appreciate. It is true that the death records thus obtained in the large areas of the country in which there is no registration are incomplete and, as regards causes of death especially, inaccurate; but they are the best we have; they are becoming better at each census, and the death records in the registration areas serve to measure their reliability, and to indicate to some extent useful corrections.

As the value of statistics of death depends very largely upon the possibility of comparing them with corresponding statistics of the living population furnishing those deaths, it is evident that the modes and times of obtaining and of publishing the results of the census are matters of great importance to medical and sanitary statisticians. This is especially true as to the frequency with which a census is taken, the units of area made use of in its published tables, and the combinations of age, sex, race, and occupation data given in connection with such units of area.

(To be continued.)

RETENTION OF URINE FROM ENLARGED PROSTATE

This condition of advanced life is met with very often both in city and country practice, and is generally easy of diagnosis, yet every consulting surgeon has seen cases where the exact condition wss not made out. There are many causes of retention, but hypertrophy of the prostate gland is by far the most common. At the recent meeting of the British Medical Association held at Leeds, Dr. McGill opened the discussion on the subject, which was reported in full in the "British Medical Journal." He laid down several propositions:

1. Prostatic enlargements which give rise to urinary symptoms are intravesical and not rectal. The severity of the symptoms bears no relation to the apparent size of the enlarged gland as felt through the rectum. Nearly every

man above the age of fifty-five has this enlargement, yet only about 50 per cent. have any urinary troubles. This is owing to the direction in which the gland is enlarged. An enormous gland may project toward the perinæum or rectum, and give no urinary symptoms, while severe symptons may be produced by a normal-sized gland as felt through the rectum. The enlargement may extend toward the rectum so as nearly to fill the lower aperture of the pelvis, causing complete intestinal obstruction. He mentions several varieties of intravesical enlargement: (1) a projecting middle lobe; (2) a middle lobe with the lateral lobes forming three distinct projections; (3) the lateral lobes alone; (4) a pedunculated growth springing from the lateral lobe alone; (5) a uniform circular projection surrounding the internal orifice of the urethra. This latter variety is quite common, but has to be seen *in situ*.

2. Retention is caused by a valve-like action of the intravesical prostate, the urethral orifice being closed more or less completely by the contraction of the bladder on its contents. A patient, finding himself unable to void his urine, soon ceases the violent efforts, the pressure on the valve is lessened, the urethral orifice is relieved, and a small amount of urine passes away. If he attempts to expel it more quickly, the flow is again stopped and it requires several trials of this kind to get relief. The time comes when he can not get any relief, although the bladder contains urine to the amount of a pint or more. The pressure, with the consequent desire of micturition, is accounted for by the fact that a more violent contraction of the wall is required to completely than to partially empty the organ, and that its muscular coat acts to greater advantage, and consequently with greater force, in its partially contracted than in its distended condition.

3. In many cases self-catheterism is the only treatment required. Under this head we desire to speak of the careless way in which many physicians cleanse their instruments. Dipping into water and wiping with a rag are not at all sufficient to render them antiseptic. The way catheters are made make it almost impossible to keep them clean, for in the space below the eye there is the best chance for filth to collect. The end should be solid instead of hollow. After use, the metal instruments should be put into boiling water and allowed to remain a few minutes and then passed through an alcohol flame until all organic matter within is volatilized by burning, and this should be continued until all smoke and steam have ceased to escape. Occasionally catheters should be put into boiling water and allowed to remain an hour or two.

4. When the catheter treatment fails or is unavailable, more radical measures are necessary. It is the writer's belief that, sooner or later, in the cases treated with the catheter, the prostatic enlargement causes death. The urine becomes thick and ammoniacal, the desire to micturate becomes continuous, the passage of a catheter relieves for but a few minutes, and the suffering and discomfort are constant. The greatest care can not always prevent them, or the grossest carelessness induce them. Some patients, especially if of a nervous temperament, can not learn to use the instrument themselves. The constant attendance of a surgeon is impossible, and the catheter treatment fails.

5. This treatment, to be effectual, should for a time thoroughly drain the bladder and permanently remove the cause of the obstruction. Perineal drainage was introduced for the purpose of giving relief in cystitis. This relief is only temporary. Either the patient must always wear a urinal or else the urinary fistula be allowed to close with the probable recurrence of the symptoms.

6. These indications can best be fulfilled by a suprapubic rather than by a urethral or perineal operation. Dr. McGill prefers the suprapubic for the following reasons: It is more generally applicable. It can be performed with greater precision and completed with greater certainty. It ensures complete and most efficient drainage. It is equally safe. He goes on to speak of the *technique* founded on an experience of thirty-seven suprapubic operations. A table of twenty-four cases is given, which includes seven cases of lithotomy. Out of this number three patients died from the operation and one from pneumonia while he was convalescent, two were under treatment when the discussion took place, and one had been lost sight of. Of the remaining ten, eight have continued well. In six of the recorded cases the prostatic retention was of long standing, and in all of them the bladder had expelled its contents since the operation. Two of the men operated upon were under the age of fifty-five. The author gives Dr. Belfield, of Chicago, the credit of first performing this operation, which he did in 1886. The discussion was participated in by ten of the leading surgeons, and it was generally conceded that this operation was justifiable in cases of prostatic retention, and would occupy a permanent place in operative surgery.—*N. Y. Medical Journal.*

SPREAD OF SCARLET FEVER BY MILK SUPPLY.—The report for the year 1888, of Mr. Henry E. Armstrong, Medical officer of health for Newcastle upon Tyne, has an interesting passage bearing upon the manner in which scarlet fever infection is sometimes carried In connection with this report the *British Med. Journal* says: "Two outbreaks of this disease were of special interest as being connected with the supply of milk from particular dairies. The first, in January, was small, and of mild type; the second, more widespread in its character, presented many features of importance, notably the comparatively remote source of infection, and the remarkable connection proved between cases and the milk supply. There was no sign of disease in the cows, and the dairy and cowhouses were clean and wholesome. but the children of a non-resident servant of the dairy had sore throats, though without any sign of skin eruption or ailment. The man was at once prohibited from coming near the premises or taking part in the business, and after due consideration, the sale of the milk was for a time discontinued. The accounts of the several cases correspond exactly with the throat appearances of the children of the dairy helper already referred to. Every one of the signs and appearances of the throat without skin rash are such as are commonly met with in typical cases of scarlet fever. In the outbreak under report, different members of a family have also had the same form of a sore throat, some with rash, and some without. From all Mr. Armstrong saw and gathered from the practitioners concerned, he has no hesitation in stating that the disease from which the children of the dairyman suffered, was the same as that from which the consumers of the milk suffered; bnt he could come to no definite conclusion as to whether the mischief was done by one delivery of milk or by several."

THE name of the Hôpital du Midi has been changed to the Hôpital Ricord, in honor of the great man whose twenty-nine years of service gave the hospital its celebrity.

The Maritime Medical News.

January, 1890.

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THE subject of fees for medical witnesses in courts of law is one of much importance to the profession. We believe that neither in Nova Scotia nor Prince Edward Island does the law make any provision for proper remuneration of these witnesses, and in New Brunswick the only statutory fees for medical witnesses are those granted in the coroner's court, the fee being four dollars for medical evidence and eight dollars if post mortem examination is made. No fees for medical witnesses in attendance on Supreme, County, or Police Magistrate's Court are anywhere mentioned in the Consolidated Statutes. The consequence is that medical practitioners are subjected to most annoying loss of time, great inconvenience, and compelled to give professional evidence and opinion, while the only remuneration they can really demand for the same is the small sum allowed any ordinary witness. As a matter of fact we believe the Judges in the Supreme Court do usually give a substantial fee to medical witnesses summoned by the crown in criminal cases, but such action appears to be optional with the judge and cannot be demanded as a right.

In the County Court we presume the judge would have the same power and it is possible that he may sometimes exercise it, but we know he does not always do so. Not very long since, in the City of St. John, a medical witness was called to give testimony concerning a case of aggravated assault in which a man was dangerously wounded. The doctor was questioned not only as to the actual condition of the patient when seen, and as to what he did for him, but was also required to give expert testimony as to the immediate and remote effects of the wounds, amount of danger to life, or of resulting deformity, &c., &c. He had to appear before the Police Magistrate and give evidence, before the Grand Jury, and then before the County Court, in which court the prisoner was sentenced to Dorchester Penitentiary. The Solicitor General who appeared for the crown, recognized the importance of the medical evidence and the trouble to which the witness had been put, and in making up his bill of charges put in a reasonable fee for him, but the Judge (Watters) of the court scratched it out and inserted in its stead the fee allowed an ordinary witness. So that it would seem that in the St. John County Court at all events that

> 'When medico-legal work's to be done, to be done,
> The physician's lot is not a happy one?'

This case, which we have no doubt is only one of many, is quite sufficient to show to what injustice medical men are compelled to submit, and will be compelled to submit so long as there is no statutory fee, or so long as he has merely the option of the judge to look to.

In England a medical witness is entitled by law to a fee of half a guinea a day for attendance at a County or Supreme Court, and travelling expenses. No one can say that these fees are excessive; they certainly are not; such as they are, however, the medical witness is sure of them, and he is not obliged to lose his time dancing attendance on magistrates and judges, to give professional evidence in cases in which he has not the slightest personal interest, without receiving at least some compensation.

The matter is one demanding a remedy and should be brought officially to the notice of the government; a proper representation of the facts would no doubt result in the passage of the requisite legislation.

NO one, medical or lay, disputes that the public have a right to the best possible organization that can be devised for the public hospital. The responsibility for the efficient organization of our Nova Scotia Hospital rests with the local government, which has executive control of the institution. If the members of the government show a disposition to discharge this responsibility in an enlightened and public spirit they deserve and will have the credit due them.

In matters pertaining to the medical organization of the hospital the government naturally would wish to defer largely to the medical staff for advice and

suggestions. It becomes the staff, therefore, to found their advice upon broad and public grounds.

It is no secret that the government have long been in some doubt as to whether the present system of attendance is that guaranteeing the greatest efficiency. The other possible systems are: 1st, The lengthening of the period of attendance by each physician and surgeon, or; 2nd, the appointment of a limited paid staff of one or two medical men, the junior resident medical staff being retained or not, according as it seemed expedient for the newly paid appointees, to reside within or outside of the hospital.

We have no hesitation in saying that under all the circumstances we believe the adoption of the last mentioned system, (*i. e.*, of a limited paid staff,) would be in the interests of neither the public nor the profession, and it would be inconsistent with and would altogether discourage, indeed paralyze, the developement of our local medical school. It is the system of half a century ago in the case of big colonial towns, and of the present day in Great Britain for example, only in those provincial towns where it has been handed down with other old customs. This system will not be found in any British or Canadian Hospital that is associated with a medical school for which it is the means of bedside instruction to the students. It is the system still in vogue in the Hospital in St. John's, Newfoundland, and we were never led to suppose that there was much especially worth copying in that institution.

No analogy can be drawn between the Hospital and the Insane Asylum. In the Insane Asylum the resident medical staff give their whole attention to a special class of disease which neither they nor other medical men are called upon to treat outside of the institution, (with single and special exceptions.) On the other hand the staff of the Hospital meet with the class of cases precisely similar to those, to treat which is the duty and life work of every medical man.

Now, where culture, lay and medical, have most advanced, it is no longer doubted that it is in the interest of the non-hospital patronizing public that a proportion of well qualified medical men ambitious for the utmost practical familiarity with the characteristics and treatment of disease, best obtainable under the favorable circumstances of observation afforded by a hospital,—that a proportion of medical men we say—should have available to them such opportunities of observation as a hospital alone affords. Such opportunities profited by re-act upon the public generally, because it is such men who do and who alone can materially further medical knowledge.

Furthermore, it is the men who are thus ambitious of profiting by these opportunities whose services are most valuable, not only to the outside public, but to the hospital patient. Of this enlightened view of medical hospital attendance, the hospital arrangements in Edinburgh, London, New York, and the continental medical centres bear ample testimony.

Such is the principle We do not believe the government will wish to act in contravention of it. To do so would be a retrograde step. The one advantage to the government of being free from the task of balancing the majority and minority reports of a comparatively independant and not unanimous staff, will not of itself, we are sure, out weigh the strong reason against the adoption of the limited paid staff system.

The other system mentioned, (it does not exhaust the varieties of organization, since in many of the chief, including *the chief*, hospital of Great Britain, a multiple staff of physicians and surgeons are in continual attendance for a limited period of years,) is the lengthening of the period of attendance from three to six months, two physicians and two surgeons being in attendance contemporaneously, the number of cases being divided between the two physicians and two surgeons respectively, (*i. e.*, each physician attending half the medical cases, and each surgeon half the surgical.

It should be remembered that the highest motive inciting to the seeking after or the acceptance of a a position on the staff of a hospital is the wish to profit by the opportunities of clinical study. We have no hesitation in saying that a man stimulated by such a motive morally has precedence over all others. The system best realizing the fulfilment of this motive is the best for the profession, provided the interests of the public are also served.

The subject, however, is now under the consideration of the hospital staff as to what course they shall recommend to the government. The matter, with others, has been forced upon the public, (unadvisedly and regretably we think,) a limited number of which will take some interest in any measures that may be adopted. It will all the more therefor be well for the staff and the government to give the question mature consideration, so that the conclusion reached may be unquestionably wise, and right from the standpoint of enlightened public spirited men.

WE notice an advertisement in the *Moncton Daily Times* of Dec. 20th, calling for tenders for medical attendance on the town's pauper patients for the year 1890. We do not know whether in previous years similar tenders have been invited. But we regret very much these evidences of an improper and unbecoming estimate of the nature and value of medical services, and we deplore the fact that these invitations are responded to.

If town and city authorities regard it as a duty to care for their poor, it must certainly be an important part of their duty to provide suitable and skillful medical aid, and the selection of a medical attendant should be made from among those well qualified and respected men who are willing to perform the duties for a proper professional remuneration.

From the citizens standpoint it should be evident that the men who would underbid their contemporaries in order to secure some trifling payment does not include, as a rule, those whose services are much worth having.

From a professional standpoint, such tendering lessens the public estimate of medical services and of medical men, and so it is a mistake from which the tenderers themselves would be liable in the future to suffer.

AN important subject calling for elucidation by the medical men of the Maritime Provinces is that of "Partridge Poisoning." We earnestly request those who have met with cases to record their observations of the symptoms, course and result of treatment. We hope that all will respond to this, addressing to the "NEWS" a letter containing as much as, (no matter how little,) they may have noted. These letters will be published or their contents embodied in an article in a future issue. It is a reflection upon us that we have not already mastered this "Partridge Poisoning," at least so far as to certainly understand its nature and the steps necessary for prevention.

WE are pleased to announce that an American edition of *The Nursing Record* is now published by Messrs. Bromfield & Co., 658 Broadway, New York. This journal has regularly come to us among our exchanges and we have always regarded it as one of the most successfully edited papers we receive. Any one interested in nurses and nursing cannot fail to be delighted with *The Nursing Record*. Every hospital in Canada should subscribe for it on behalf of its nurses, and medical men can get a surprising amount of valuable information from its pages.

Reviews and Book Notices.

OXYGEN AND OTHER GASES IN MEDICINE AND SURGERY. By J. N. Demarquay, Surgeon to the Municipal Hospital, Paris, aud of the Council of State, &c., &c. Translated with notes, additions, and omissions, by Samuel S Wallian, A. M., M. D., President of the Medical Association of Northern New York, &c. Price, cloth $2.00, ½ Rus- $3.00, net. F. A. Davis, Publisher, Philadelphia.

A book on this subject must, at the present day, be interesting, since oxygen and some other gases promise to be of distinct service to us as soon as we understand more thoroughly the indications and the favorable times and mode of use. For instance there is considerable testimony to the value of oxygen inhalations during and between asthmatic attacks. Asthma is mentioned as the disease for which oxygen is most prescribed. Twenty-two cases are recorded in this work of which ten were cured, nine relieved, and three not relieved. "It is probable that the word *cure* implies that oxygen has interrupted the paroxysms, and not that it has caused the disease to permanently disappear." We confess to a supposition that if certain cases of asthma are due to peripheral rather than to central irritability, the paroxysms of such cases would be increased, not lessened by the inhalation of oxygen. Such an effect seems to have been observed. On the other hand the inhalation of oxygen frequently cuts short a paroxysm of asthma. Why it does so or should do so is difficult to say; the more so that our knowledge of the pathology of asthma itself is so deficient. The good effect of oxygen inhalations on convulsions, chlorosis, dyspepsia, scrofulous tumours, melancholia, general debility and many other diseases, medical and surgical, is affirmed and illustrated by cases.

Nitrogen, nitrogen monoxide, and hydrogen are also considered, and many useful suggestions as to apparatus and other details are found in the text and in the translator's notes. There is much need for further observation in this department of Therapeutics. This work will be interesting and valuable to any who wish to read up the subject.

We may say that we are strongly impressed with what we may call the physical effects of systematic inhalation for five or ten minutes each day. We have seen the most gratifying increase in chest capacityfrom the regular inhalation of antiseptic and other drugs by means of the various inhalers now in use.

As usual with Messrs Davis' publications, the type is all that could be desired.

A TREATISE ON MATERIA MEDICA, PHARMACOLOGY AND THERAPEUTICS. By John V. Shoemaker, A. M., M. D., Professor of Materia Medica, &c., in the Medico-Chirurgical College of Philadelphia, &c., &c., and John Aulde, M. D., Demonstrator of Clinical Medicine and of Physical Diagnosis in the Medico-Chirurgical College of Philadelphia, &c. Two vols. Vol. I ready, price, cloth $2.50; sheep $3.25, net. F. A. Davis, Publisher, 1231 Filbert St., Phila delphia, Pa.

VOL. I.—It will not be said of this work that there is nothing new about it. The first good point we note is that therapeutics is from beginning to end the principal object in view. So, not only is the order of arrangement adapted to the convenience of the student of the detailed and diverse properties of each individual drug, (by means of an alphabetical arrangement in the section on materia medica,) but the requirements and convenience of the therapeutist are met by an arrangement of drugs and remedial agents, according to their most pronounced actions, (in the section on pharmacology.) The sections on pharmacy and pharmacology are comprehensive, and are thoroughly readable and useful.

A few pages are devoted to "general considerations on therapeutics," which include many instructive hints, and information on such matters as absorption and elimination, incompatibility, medicated inhalations, alimentation, dietary for the sick, &c.

The rest of vol. I is devoted to "remedies and remedial

agents used in the treatment of disease not properly classed with drugs" This section occupies over 200 pages and includes detailed, but most interesting consideration of such subjects as electro-therapeutics, oxygen, hydro-therapeutics, masso-therapeutics, heat and cold, mineral waters, metallo-therapy, transfusion, hypnotism and suggestion, earth dressing, climatology, light, music, blood letting, suspension, &c. With some of these subjects the general practitioner is not yet as familiar as he would like. We cannot recommend a better source of information than this work of Shoemaker and Aulde. Not only does the name of the former justify high expectations, but we congratulate him and his coadjutor upon their fulfilment.

The printing is in large clear type, and throughout the text important points are accentuated by bolder type.

We are more pleased with this work than with any other materia medica with which we are acquainted.

PHYSICIAN'S VISITING LIST, 1890. P. Blakiston, Son & Co., 1012 Walnut St., Philadelphia.

This is one of the handiest lists available. At the top of the left hand column of each page is the name of the month, the column being wide enough for the patient's name. To the right are seven narrow columns headed by the names of the different days. To the extreme right is a column where the total charge of the week's work may be placed opposite each patient's name. Each page is arranged for a week's work and will accommodate the names of 26 patients per day or week. There are added a dose table, a list of new remedies, directions for disinfecting, examinihg the urine, &c., and at the back of the pocket book are pages for obstetric engagements, obstetric cases, bills and accounts asked for, addresses of patients, memoranda, cash account, &c., &c. There is a pencil pocket, &c. Price, $1.00.

AMERICAN ARMAMENTARIUM CHIRURGICUM.

We have received from Messrs. George Tiemann & Co.' 107 Park Row, New York, a copy of the "American Armamentarium Surgicum. This is an imperial octavo volume, contatning 862 pages and over 3,400 first-class wood engravings, and is well printed on good paper. It is probably the most comprehensive instrument catalogue in the English language. It is an education in instruments to turn over its pages. One is really instructed in many practical details and is surprised to find the numberless devices in all sorts of instruments that betoken the ceaseless effort after perfection. Orthopoedic and other varieties of surgical apparatus are included and minutely illustrated.

Interspersed among the illustrations are descriptions of surgical procedures and operations, and explanations of the manner of using the instruments.

As has been remarked it may be questioned whether one would be inclined to consult the text as a work of surgical reference or as an authoritative operative treatise. But that Messrs. Tiemann have spared no expense or trouble in their effort to make the catalogue fully explanatory there is no doubt. We believe it would be to the advantage of surgeons to possess a copy of this catalogue. When it is known that the catalogue forms a bound volume of about the size of the Encyclopedia Britannica, it will not be expected that Messrs. Tiemann can send a copy to every medical man for nothing. But one copy will be sent to every physician upon the payment of one dollar for cost of binding, express charge to be paid by recipient.

PLANTATION PROVERBS.

It doan' pay to do much talkin' w'en you' mad enuff to choke,
'Kase de word dat stings de deepes' am de one dat's never spoke.
Let de odder feller wrangle till de storm am blowed away,
Den he'll do a pile ob thinkin' 'bout de things you didn't say.
—*Times and Register.*

THE *Milwaukee Journal* says that dyspepsia and a broken heart exhibit a wonderful similarity in their surface indications.

Notes and Comments.

THE classes at the Halifax Medical College broke up for the Xmas holidays on Dec. 19th, after a successful session. There are upwards of thirty students in attendance, which number must be regarded as very encouraging for the first year of resumption of the full course. Lectures will be resumed on Jan. 6th.

EXPLOSIVE MIXTURES.—Professor Robert calls attention to the following explosive mixtures:—Chlorate of potash mixed with charcoal dentifrice powder, may explode, even in the mouth. Chlorate of potash mixed with catechu, or with tannin, explodes with friction, even if glycerine is added. Chlorate of potash and phosphate of sodium exploded while mixing the powder. One part of chromic acid mixed with two parts of glycerine, explodes immediately, Iodine and Ammonia should never be mixed together, as they are extremely apt to explode. Bromine and alcohol, forming the bromide of ethyl often explodes. Picric acid reduced to powder, explodes when mixed with any other substance.—*Weekly Medical Review.*

THE English Courts have lately decided that in a case "where a wound is given which, in the opinion of competent medical advisers, is dangerous, and the treatment which they adopt is the immediate cause of death, the party who inflicted the wound is criminally responsible." This decision was reached in a case in which it was sought to shift the responsibility from the person who inflicted the wound upon the doctors who sought to save the man's life. Thus the surgeon is free from more than ordinary responsibility in treating such cases. As a result he will be inclined to undertake operations for the relief of the injured that otherwise he would not, and so give the accused a better chance of avoiding the charge of murder.—*Amer. Lancet.*

PRINCE EDWARD ISLAND.—Charlottetown and Queen's County—no information has been received from Prince and King's Counties—have been visited during the month by an epidemic of Jaundice. All the factors which may give rise to gastro-intestinal catarrh must of course be included among the existing causes of Catarrhal Jaundice, such as errors of digestion, cold and exposure, rapid and frequent changes of temperature, and probably also miasmatic atmospheric causes. As a rule in Epidemics of Jaundice, neither age, sex, nor condition, confers any immunity, but in some epidemics on record children were almost alone affected. Here also while adults frequently complained of feeling "bilious," children numbering one, two, three and four in each family, were affected. Is such an epidemic of bacterial origin? It is claimed that gastric, intestinal, and other catarrhs, notably those which develope epidemically and endemically, as summer complaint, cholera morbus, influenza, &c., are due to infectious influences. Is not this true also of Epidemic Jaundice? To explain its existence in an endemic form, as in barracks, prisons, &c., some local source of infection must be assumed.

THE EARLY DIAGNOSIS OF INFECTIOUS DISEASES.—An action for damages, which are laid at $50,000, has been brought by a young man against the City of Philadelphia, under rather peculiar circumstances. He was admitted into the Municipal Hospital under the impression that he was suffering from small-pox, and was placed in a ward with small pox patients. An hour and a half after admission he was seen by the surgeon in chief, who seems to have then had some doubts about the nature of the rash. On the following day, however, there was

no longer any doubt that the man was suffering from measles and not small-pox. No facilities, it would appear, existed for isolating him from the small-pox patients, though it may be doubted whether such isolation would have been of any use after so many hours exposure. He was vaccinated without result. He subsequently developed hœmorrhagic small-pox, which was followed by extensive paralysis; altogether he was in the hospital over four months. He founds his claim for heavy damages on the ground that he was crippled for life. The case illustrates very well a difficulty in which medical officers of fever hospitals are often placed; thus, to quote only two recent instances, Dr. R. D. R. Sweeting, in his report on the Western Hospital of the Metropolitan Asylums Board for 1887, states that 21 cases of measles and rötheln had been admitted during the year, 13 certified as scarlet fever and 8 as enteric fever; again, Dr. R. A. Birdwood in his report on the Small-Pox Hospital Ships for 1888, states that four patients, not suffering from small-pox, had been admitted on mistaken diagnosis; the diseases they were actually suffering from were scarlatina, syphilis, eczema, and ecthyma.—*British Medical Journal.*

[The result of this action will be awaited with much curiosity, as very important interests are at stake. Boards of Health in this country are granted most despotic powers, it may be necessarily so, they should consequently make no mistakes or at least take every possible means of guarding against mistakes. This trial will show whether they are to be held responsible for the mistakes of their officials or not. It would seem that they ought to be. Similar mistakes to that referred to are occasionally made in our own country, and patients, certified as having small-pox and admitted to hospital for that disease, found affected with measles. This same question of responsibility in reporting cases of infectious diseases to Boards of Health, where such reports are followed by quarantine, &c., is one that the private practitioner should not forget; and it would be interesting to know in a case quarantined or sent to small pox hospital on the certificate of a private practitioner who had wrongly diagnosed the disease, but whose certificate was accepted, without further verification, by the Health Authorities, whether the responsibility would fall on the practitioner or the authorities. The compulsory notification of infectious diseases by physicians places on them a very grave responsibility, both as to pocket and reputation, and when, as in New Brunswick, work has to be done without fee or reward, is a most unjust piece of legislation.—ED.]

THE TREATMENT OF ENDOMETRITIS.—The local treatment usually adopted by Dr. Mundé in endometritis without hyperplasia of the mucous membrane is as follows: If necessary, the os is dilated; the cavity of the uterus is then thoroughly mopped with a 50 per cent. solution of chloride of zinc, the applicator being introduced several times in order that no portion of the endometrium may escape cauterization. A cotton plug covered with vaseline is then inserted into the uterine cavity, and an iodoform tampon placed on the cervix. After this the patient is put to bed, with an ice-bog upon the hypogastrim.

In two days she is allowed to get up, the tampons are removed from the uterus and vagina, and lukewarm douches of a 2 per cent. carbolic solution given twice daily. In a week or ten days, the slough having separated from the endometrium, an application of chloride of zinc solution, 20 grains to the ounce, is again made to the cavity.

The carbolized douches are continued, and when the discharge decreases in amount, gelatine-coated pencils, containing 5 grains each of iodoform and alum, are inserted into the uterus.—*Annals of Gynecology, Nov., 1889*

EFFECTS OF THE ENTRANCE OF AIR INTO THE CIRCULATION.—Dr. H. A. Hare (*Therapeutic Gazette*) from experiment says:

1. Death never occurs from the entrance of air into the ordinary veins of the body unless the quantity be enormous, —from one to several pints, a quantity which cannot enter unless deliberately sent in by the surgeon.

2. The cases on record have been due to other causes than air and have not been proved.

3. The tendency of the vessel to collapse, and the leakage of blood, prevent any entrance of air, and it would seem probable that a clot has generally caused death, not the air itself.—*Amer. Lancet.*

PARIS EXHIBITION.—W. R. Warner & Co. have received a silver medal at the Paris World's Fair, being the highest of its kind, in recognition of the following claims:

First.—W. R. Warner & Co.'s Pills, quick solubility and accuracy.

Second.—Reliability and permanency unsurpassed.

Third.—Perfection in coating, thorough composition and accurate subdivision.

Fourth.—Excellence in solubility of the finished product in from 4 to 6 minutes.

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First.—Superior effervescing properties.

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Third.—Stability of the effervescing quality sustained by critical examination.

This is the 13th World's Fair Medal which attest to their superiority.

Pamphlets Received.

FOURTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH, (Maine).

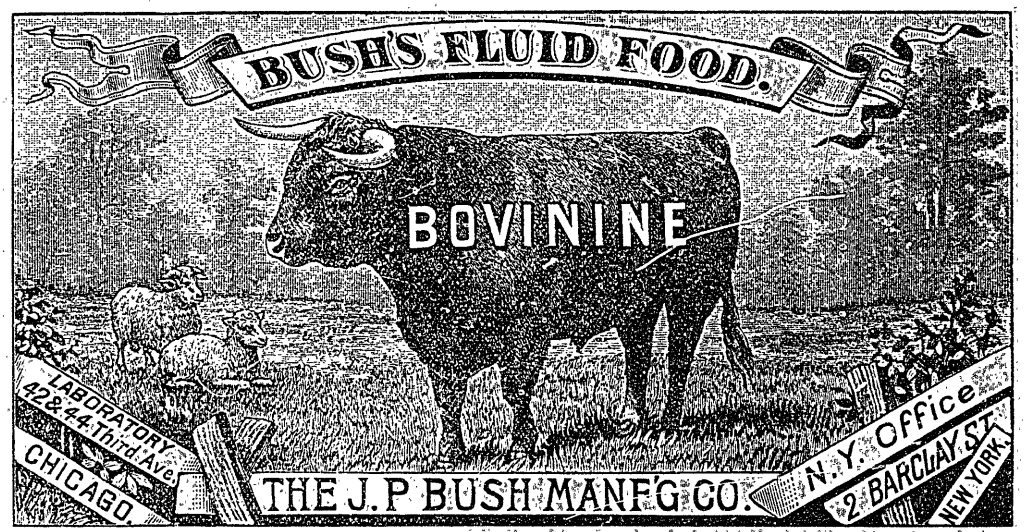
TWENTIETH ANNUAL REPORT OF THE MANHATTEN EYE AND EAR HOSPITAL.

THE CURE OF CROOKED AND OTHERWISE DEFORMED NOSES.—By John B. Roberts, A. M., M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic, Lecturer on Anatomy in the University of Pennsylvania, &c.

In this pamphlet are given detailed suggestions as to the treatment of particular nasal deformities. Dr. Roberts shows how many of the ordinary but still unsightly nasal deformities may be remedied by means quite at the disposal of the intelligent and careful surgeon. A number of illustrations increase the practical value of the paper.

CONCEALED PREGNANCY—ITS RELATIONS TO ABDOMINAL SURGERY. By Albert Vanderveer, M. D., Ph. D., Surgeon to the Albany Hospital, Professor of Didactic, Abdominal and Clinical Surgery in the Albany Medical College, &c.

In this pamphlet Dr. Vanderveer tabulates some 70 cases of suspected abdominal disease which were operated upon; the operator learning (after having opened the abdomen) of the existence of pregnancy, complicated or uncomplicated by new growths. The difficulties of recognizing pregnancy under certain conditions are fully stated, and the conclusion advanced that such mistakes are unavoidable. Many of the cases mentioned are reported for the first time.



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This axiom, formulated by the lamented Fothergill, conveys a world of meaning to the intelligent physician. If a food can be obtained containing all the elements necessary for the nourishment and support of the body and which can also be readily assimilated under every condition of disease, an immense advantage is obtained in controlling symptoms and restoring wasted tissues. Mal-nutrition and mal-assimilation are potent factors in a long train of severe illnesses. **Bush's Fluid Food, Bovinine,** combines in a concentrated form all the extractive or albuminous properties of uncooked beef together with its stimulating salts.

Dr. Geo. D. Hays, of New York Post Graduate School, in an exhaustive paper on Artificial Alimentation thus alludes to Bovinine: "Of the preperations of raw food extracts one has a clinically proved value It is rich in nitrogenous substances and phosphates. It is readily digested and absorbed and can be relied upon for the entire sustenance of the body for a considerable period."

The blood corpuscles which carry such a wealth of vitalizing power, are found in Bovinine intact, as revealed by the microscope in countless thousands.

B. N. Towle, M. D., of Boston, in a notable paper on Raw Foods, read before the American Medical Association at Washington, D. C., May 6th, 1884, thus refers to Bovinine: "I have given it to patients continually for months with signal comfort especially in complicated cases of dyspepsia attended by epigastric uneasiness arising from inervation, and in nervous debility of long standing. Raw food is equally adapted to acute lingering diseases"

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