

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

THE CANADA MEDICAL RECORD.

VOL. XIII.

MONTREAL, JULY, 1885.

No. 10.

CONTENTS.

ORIGINAL COMMUNICATIONS.		
Cholera and the Comma Bacillus.....	217	A Valuable Remedy for Headache.....
Gynæcological Report	222	Ingrowing Toe-nail—Definition.....
PROGRESS OF SCIENCE.		Notes on Asthma.....
Pneumonia in Young Children.....	223	
A Liniment for Earache.....	225	EDITORIAL.
Induction of Premature Labor.....	225	Small-pox
On the treatment of the graver		Treatment of Ringworm.....
forms of Acute Bronchitis.....	225	Spaying for Uterine Fibroids.....
Who Owns the Prescription.....	226	The Medical Service.....
Artificial Sea Air.....	227	Craniotomy.....
Pilocarpin in Erysipelas.....	227	The Late Alfred Jackson, Esq.,
A Practical Point in the Treat-		M.D., Quebec.....
ment of Pleural Effusions.....	227	Personal.....
		Pamphlets Received.....
		College Announcements Received.....
The Treatment of Sick headache..	227	
Asthma.....	227	
Absence of Vagina, Uterus, and		
Ovaries in an apparently well-		
built Woman.....	227	
Cholera Infantum	228	
Cholera Vaccination.....	228	
A Method of Averting Syncope.....	229	
A New Procedure for the Goitre.....	229	
A Treatment of Ringworm.....	229	
External applications of Ether for		
Vomiting	230	
Incontinence of Urine.....	230	
Ergot in the Treatment of Cough..	230	
A New Remedy for Diphtheria.....	230	

Original Communications.

CHOLERA AND THE COMMA BACILLUS

By J. B. McCONNELL, M.D., C.M.,

Professor of Materia Medica, and Therapeutics and
Lecturer on Histology Medical Faculty Bishop's College.
(Read before the Médico-chirurgical Society, June, 1885.)

I draw your attention to this subject this evening more with a view of eliciting a discussion upon it than with the hope of adding anything to your knowledge concerning it.

It is well, I think, that we should now especially direct our attention to the consideration of what is already known about cholera. Few of us have ever witnessed an epidemic of this affection, but it is the expectation of many, and a study of the history of previous epidemics would indicate that we may be called upon this summer to contend with an invasion of this scourge, which, in a majority of instances, baffles the most skilful treatment and resists every device of therapeutics.

All epidemics of cholera have their origin in the region about the delta of the Ganges in India, and the course pursued by those which have reached this continent has usually been north-westward through Afghanistan and Persia, over the Caucasus, or along the Caspian to Russia, thence through northern Europe to England and across the Atlantic. The epidemic which threatens us this year is taking a shorter route: it left its seat about 1880, prevailed in Arabia in 1881 and 1882, ravaged Egypt in 1883 and France in 1884.

This year, its existence has already been reported in Calcutta, Toulon and Marseilles, and in the province of Valencia and other parts of Spain. It is epidemic. Should it spread to England the probability of its being conveyed to this country will be great.

Before entering upon the subject indicated by the title of this paper I may mention a few facts concerning disease germs:

The germ theory of disease refers to the introduction into the system of the lowest type of plants which, from being found in the body in connection with many specific diseases, are supposed to be their cause. They belong to the lowest group of plants, the protophyta, class schizomycetes, order bacteriaceæ. These minute plants (bacteria) consist of a single cell, and reproduce themselves by dividing into two (fission), and these again into two, and so on as long as they are provided with nutriment; failing which they form a powdery precipitate, which is regarded as a resting state. The spores thus formed having the power of germinating again when the surroundings are favorable. Bacteria require moisture or fluids for their development. They consist chiefly of protoplasm, have no chlorophyll, and are sometimes provided with cilia (also called the flagelli) which by their lashings enable them to move about in liquid media. The cells sometimes appear in groups, held together and separated from each other by a jelly-like matrix, formed by a partial degradation of their cell walls. This is called the zooglea form.

Pasteur terms bacteria which require free oxygen, *aerobies*, and those which can live without free oxygen but have the power of wresting it,

from its combination with other elements, *anaerobies*.

There are three sub-divisions or genera of bacteria:—i. Micrococcus, when the cells are round or elliptical; diplococcus, two of them joined together; streptococcus, if united into a chain. ii. Bacillus cylindrical rod-like or filiform cells. Cohn termed curved filaments vibrios. iii. Spirillum, spirally twisted or screw-shaped cells.

In order to detect these minute and almost invisible organisms and study their characters and habits, microscopes magnifying from 400 to 1,000 diameters are required. They are so minute that according to Dr. Dallinger 50,000,000 would not occupy a space greater than the 1-50th part of a cubic inch. They are found wherever organic matter, animal or vegetable, is undergoing decomposition, in stagnant water, and all solutions containing organic substances, and dried bacteria or their spores are found in myriads adhering to every object around us and to the minutest particles of dust floating in the air, seen in a ray of sunlight, and which make the ray visible.

The decomposition or putrefaction of organic matter and the process of fermentation are solely the result of the life-work of bacteria.

Having no chlorophyll they develop only in fluids and other media containing organic matter, and thrive best where it is abundant.

They develop very rapidly under favorable circumstances; according to Cohn a new generation can form in an hour. They require a certain amount of heat for their development which varies with different species; cold and high temperature arrest their development; in the moist state a temperature of 140° F. will destroy them, but a higher degree is required in the dry state.

The spores of bacteria are of all living matter the most difficult to destroy, are unaffected by low temperatures, and require in the moist state the temperature of boiling water to destroy them, and when dry a temperature of 300° and over. Bacteria thrive best in alkaline solutions, hence in the stomach the normal acid present during the process of digestion checks their growth, but they grow luxuriantly in the intestines where they are supposed to assist in normal digestion. In normal healthy animals they are not found in the blood or tissues. The latter must have the power of overcoming the ordinary bacteria of putrefaction; but certain species are capable of holding their own there and multiplying, when a disturbance in the

animal economy ensues, which is shown in the symptoms of the various infectious diseases. These are the diseases producing a pathogenic germs.

It was a Dutch microscopist named Leeuwenhoek, who first announced, in the year 1683, the discovery of these minute micro-organisms which are now known to be so intimately connected with the processes of disease, fermentation, decomposition, etc., but it is only by investigations made during the past 20 years that most of the knowledge we now possess on this subject has been gained. Conspicuous among those who have labored in this field stand the names of Louis Pasteur and Dr. Koch, although much has been learned from the researches of Cohn, Rayer and Davaine, Loeffler, Toussaint Chauveau, Buchner, Klebs, Tommasi Crudeli, William Budd, Watson Cheyne, Bilroth, Ehrlich, Lukomsky, Klein, Vandyke, Carter Luginbuehl, Oertel, Hansen, and many others.

Bacteria have been discovered by different observers associated with the following affections, and have in some of them been satisfactorily demonstrated to be their cause, anthrax, pyæmia, septicæmia, osteo-myelitis, malignant œdema, erysipelas, glanders, relapsing fever, typhoid fever, variola, cow-pox, and sheep-pox, virus, measles, diphtheria, malarial fever, syphilis, gonorrhœa, endocarditis, croupous pneumonia, pertussis, trachoma, pterygium, tuberculosis, and some others.

Recently Pasteur has discovered a micro-organism in hydrophobia and by attenuating the germs and inoculating dogs with them has rendered the latter insusceptible to the influence of the most potent rabic virus.

From these facts the existence of a cholera germ would seem to be very probable, and accordingly we find that for forty years back search has been made for it. Bohm, in 1838, found cryptogamic bodies like ferment fungi in the dejecta and intestines. Brittan, Swayne, and Hughes Bennet found micro-organisms in the Bristol epidemic of 1849. Vibrios were discovered by Pouchet and cercomonas by Davaine; and Paccini in 1854 and 1856 discovered bacteria in connection with this disease. Dr. Bristowe, in 1866, seems to have approached nearest to the discovery of the cholera bacillus; he found a curved bacillus, but the cessation of the epidemic rendered further study of the germ impossible. McCarthy & Dove found motile elements.

Researches have also been made in this direction by Hallier, Klob & Thorm, Debary, Cohn, Cunningham and Lewis. Dr. J. C. Peters, New York states in the *Medical Record* that Dr. Dundas Thompson and Dr. Hassal discovered vibrios in the rice-water discharges, and in experimenting with them found out of a great many drugs only tannin, chlorine water and dilute sulphuric, hydrochloric and nitric acids were capable of destroying them.

No other theory of cholera or other infectious disease would so fully explain all their characteristic features as the doctrine that they depend on distinct species of micro-organisms, which has been advocated so long by the ablest writers on the ætiology of disease. The recognised power the virus has of multiplying itself within and outside the body, the fact that it develops only when organic nutriment is furnished, and requires heat, moisture and oxygen, and the deleterious influence of cold, high temperatures and drugs inimical to plant life; the power the poison has of retaining its virulence on fumilis, etc., after long intervals; the fact that the poison of each infectious disease has distinct characteristic actions upon the system, which are uniformly maintained, although in varying degrees; the period of incubation; self-limitation and definite duration, can only be clearly explained by the theory that the cause is a living organism, each disease having a distinct species of parasite. The fact, already fully demonstrated, that some infectious diseases are produced by parasitic plants, would seem to place the matter beyond theory and to be a very strong argument in favor of the view that all are likely to own a similar cause, hence an important field of bacterioscopic enquiry opens up: the discovery of the germ belonging to each affection and the study of its peculiar characteristics, what circumstances and agents favor its development, and what hinders. In this way we may hope that, in the near future, the treatment of these affections will be removed from the empiricism which has hitherto prevailed, and a rational, scientific system of therapeutics pointed out.

As yet the agents found to be destructive to these bacteria outside the body would, in the strength required, be fatal to the patient if administered as remedies. The discoverer of a remedy which will arrest the development of bacteria in the system, and at the same time be

innocuous to the host, will confer a boon on humanity that will place his name among those of the highest rank of human benefactors.

John Tyndall, in his introduction to the life and labors of Louis Pasteur, written recently by the latter's son-in-law, and translated by Lady Claud Hamilton, states in reference to this subject: "never before during the long period of its history did a day like the present dawn upon the science and art of medicine; indeed previous to the discoveries of recent time medicine was not a science but a collection of empirical rules depending for this interpretation and application upon the sagacity of the physician." "A great scientific theory has never been accepted without opposition. The theory of gravitation, the theory of undulation, the theory of evolution, the dynamical theory of heat, all had to push their way through conflict to victory, and so it has been with the germ theory of communicable diseases." Where the mind of genius discerns the distant truth which it pursues the mind not so gifted discerns nothing, but the extravagance which it avoids.

Bacteriology will doubtless soon become a part of the regular curriculum of medical studies. In Germany the Government last year summoned to Berlin medical men from various parts of the empire to study the method of Koch and others for investigating bacteria and micro-organisms, and other countries will doubtless soon follow in this line of advancement.

All believers in the germ theory were filled with hope when it was announced that Dr. Robert Koch, chief of the German Scientific Commission for the Investigation of Cholera, had gone to Calcutta to investigate the supposed cholera germ. His brilliant discovery of the bacillus tuberculosis, in 1882, had already caused him in the estimation of the scientific world to be regarded as the most eminent and reliable living bacteriologist.

In his report of January, 1884, he announced the discovery of a bacillus occurring invariably in the cholera discharges and intestinal contents, and also in the intestinal mucous membrane, but not in the stomach.

The lower part of the ileum was the chief seat of the bacilli. When Peyer's patches were reddened he found a considerable invasion of bacteria occurring partly within the tubular glands, partly between the epithelium and basement membrane, and in some parts deeper still. The bacilli were found most abundantly in acute cases, in later stages they

were replaced by bacteria of decomposition, disappearing with the return of fecal discharges and entirely absent when death resulted from the sequelæ of cholera.

He could not find this bacillus in healthy persons nor in any other affections, even in such allied ailments as diarrhoea, dysentery, etc. He found the same bacilli in a water tank which was supposed to have spread the disease. These tanks supply the water used for bathing, drinking and laundry purposes, the linen of the first cholera patient was washed in the tank, and out of the two or three hundred people living around it and using the water, seventeen died. He could not find the bacillus in any other tanks, and no cholera existed near any of them. When the bacilli disappeared from the water of the tank around which cholera prevailed the epidemic ceased.

The bacilli were curved like commas, and were sometimes joined together, appearing like the letter S, hence he thinks they may be spirilli rather than bacilli. They are very mobile, and occur in colonies of wavy masses. By cultivating them he learned that they thrive best at a temperature between 30° C. (86° F.) and 40° C. (104° F.), but their growth is not prevented by lower temperatures until 17° C. or 16° C. (60.4-5° F.) is reached. He exposed them to a temperature of -10° C., thus freezing them, but they would afterwards grow in gelatine. They required oxygen for their growth, but being deprived of it did not kill them. They grew with exceptional rapidity, the growth quickly attaining its maximum and after a brief stationary period as quickly terminating. They grew luxuriantly on linen or soil moistened with choleraic discharges, quickly outnumbering all other bacteria present, but after two or three days the bacteria of putrefaction would replace them. An acid condition of the medium in which they were cultivated checks their growth.

In regard to the influence of drugs upon them he found that 1 part of iodine in 40,000 had no effect on their growth, 1 part of alcohol in 10 was the least proportion that had any influence upon them, 2 per cent. solution of sulphate of iron, which will arrest putrefaction, did not affect the comma bacillus, nor did 2 per cent. solution of common salt,—a greater strength than those could not well be used for internal administration. Alum 1 in 100 prevents their growth, and so does camphor 1 in 300, carbolic acid 1 in 2,500, quinine

1 in 5,000, and corrosive sublimate 1 in 100,000. But these proportions place their administration beyond the range of practical therapeutics.

An important point is the fact that drying the bacilli for an hour or so readily destroys them. Hence he doubts if they ever pass into a resting-state. He cultivated them for six weeks and no spores were formed, but they may yet be discovered. Infected clothing or earth, when subjected to drying for 24 hours and upwards, were completely disinfected.

Koch had not been able to produce cholera in animals by inoculating with the comma bacillus, but two Swiss physicians, Drs. Reitsch and Nicati, at Marseilles last year succeeded in doing so, by placing the virus in the intestines below the stomach, and Dr. Koch subsequently confirmed these experiments. Guinea pigs dying with symptoms of cholera in 12 hours after being inoculated with an attenuated virus. The bacilli are usually destroyed in the stomach, but when this organ is deranged and the food partially digested, the bacilli may pass to the intestines, where they immediately begin to multiply. The symptoms which follow are supposed to be caused by the action of a specific poisonous substance produced by the bacilli. The cells of the mucous membrane are destroyed and the watery portion of the blood is poured out at the seat of the irritation.

The fact that the bacilli are soon destroyed by drying would favor the view that the poison of cholera is usually conveyed through fluids or damp clothing and not by the atmosphere. Dr. Koch says it is not proved, and doubtless never has occurred, that cholera has been transmitted by letters. The rapid development and decline of the bacilli would seem to accord with the brevity of an attack of cholera and the comparatively short duration of a cholera epidemic; and no spores being formed also accords with the fact that cholera does not usually reappear in the year following an epidemic.

The invariable occurrence of the comma bacillus in connection with cholera suggests a means of at once recognizing its presence by an appeal to the microscope, and the cultivation of the bacilli, and thus in doubtful case, valuable time might be gained for adopting measures towards checking the spread of the disease, and if recognized in individuals appropriate treatment might be employed in the earliest stages when only, as a rule, it is likely to be successful.

In regard to treatment, the discovery of the bacillus has not as yet pointed to any resource not hitherto amply tested. In the early stages opium is undoubtedly the sheet-anchor, although the manner in which it affects the bacillus is not yet understood, and as the mineral acids and camphor are inimical to the growth of the bacilli these may be added, and together with spirits of chloroform and some of the essential antiseptic oils, as cajeput, cinnamon, peppermint would seem to be an appropriate treatment. Cold checks the growth, hence heat and friction should be applied to the extremities, and ice to the abdomen, and the free use of ice-water draughts acidulated with sulphuric, nitric hydrochloric acids or liq. acidi phosphori should be allowed. The bacilli are said to be in the intestines only, and not in the blood, hence if the mucous surface could be flushed by the free use of such drinks benefit should be obtained from their specific action in addition to the advantages gained from their astringent effect.

As the bacilli are destroyed by drying and by high temperature, the employment of dry heat is thus suggested as the best means for destroying them. Dr. Koch found corrosive sublimate the most efficient destroyer of germs, although, according to Miquel, it is only one-third as powerful an antiseptic as the bin. iodide.

As the bacilli are found chiefly in the intestinal discharges, their complete destruction by burning or disinfection would prevent the spread of the disease, and as their growth outside the body depends on the presence of organic matter the entire removal from about dwellings of all organic refuse matter, and absolute cleanliness of house and person, and keeping cholera dejecta out of the sewers, would be efficient preventative measures.

Koch's discovery of comma bacillus and his conclusion, strengthened by the results of subsequent investigation in Egypt and Toulon, that it is the cause of cholera has, led to considerable controversy, and has during the past year agitated the scientific world more than any other subject. His opponents cite such alleged facts as the following in opposition to his views. Thus Drs. Finkler and Prior of Bonn, and Klein and Gibbes, London, claim to have discovered the comma bacillus in sporadic cholera, and the latter found it also in dysentery, phthisis and in the mouth. Dr. Deneke, of the Hygienic Institute, Gottingen, has found a comma-shaped organism in stale

cheese. W. D. Muhler discovered a bacillus in the saliva, which Dr. Lewis believes to be identical with Koch's bacillus. The reply to these objections, by Dr. Koch, Mr. Watson Cheyne and Dr. Heron, London, Dr. Van Ermengen, Belgium, and other investigators, is that morphological criteria alone are not sufficient to show that the bacilli are identical. Their physiological characters must be similar. Under cultivation the mode of vegetation and the colonies, etc., of the above are quite different from the cholera bacillus, hence they are distinct species.

Dr. Emmerich, of Munich, who was sent to Italy by the Bavarian Government, supported by Buchner, claims to have discovered a bacillus in the blood and internal organs, which he believes to be the true cholera bacillus, and M. Strauss and Roux, of the French cholera commission, who, in their investigations at Toulon last year, found the comma bacillus—the result of their researches in the main coinciding with those of Dr. Koch—also claimed to have discovered a bacillus in the blood. But Dr. Koch points out that in healthy blood, besides red and white corpuscles, there exists in varying numbers small, roundish pale elements, the so-called "bloodplates"; in some febrile diseases they are greatly increased, and are often mistaken for bacteria. Ignorance of this fact led the French commission to conclude as they did.

At the meeting of the Royal Medical and Chirurgical Society of London, held on March 24th and 31st last, cholera was the subject for debate. Drs. Klein and Gibbes, of the English cholera commission, who were sent to India to study the relation of the comma bacillus to cholera, arrived at conclusions mostly adverse to those of Koch. Yet they do not deny having found Koch's bacillus in all cases examined, but they are inclined to look upon them as a post-mortem occurrence, and they could not produce any effect by inoculation, but Koch himself, the ablest experimenter living, failed also in his first attempts. Dr. Klein held views previously in regard to cholera which he could not well maintain if Koch's conclusions are correct, hence he was undoubtedly somewhat prejudiced when entering upon these investigations. He claimed also to have discovered a straight bacillus in greater abundance than the curved, and they are observed in the specimens I received recently from Germany through Mr. T. Heinrich, Baltimore, which you are invited to examine this evening.

Mr. Watson Cheyne, in reply, said that much misconception appears to have arisen from the adoption of the phrase "comma-shaped," for it appears that the curving is but an incident of one stage in the life of the bacillus. It is at one time straight, then curved, and sometimes spiral, but, whatever its morphological change is, it exhibits invariably the same actions and characters on cultivation.

Mr. Macnamara, an eminent authority on cholera, agreed with Mr. Cheyne's statement, that what was known of the properties of cholera contagium 20 years ago corresponds with those now recognized as belonging to the comma bacillus and he has found in practice that the most appropriate treatment for cholera is that which is most obnoxious to the bacillus. Hence he accepts fully Koch's conclusions.

It is generally conceded that the results obtained by the investigations of the English Cholera Commission have, on the whole, rather confirmed Koch's views than otherwise, and the crucial test to which his doctrine has been subjected in the keen criticisms of this body of pre-eminent scientific physicians has not in the least weakened the position assumed in its promulgation. The value of this discovery is beyond estimation. For centuries vague and diverse views have prevailed regarding the cause of cholera, and the means adopted for staying its ravages have been as varied as the theories entertained. No satisfactory solution of the problem had hitherto been made, and it has remained for the acute intellect of the year 1884 to reveal the pernicious offender, and we may hope that further investigations will, in the near future, point out the best means of combating its destructive effects. Dr. Austin Flint in a recent communication in the *New York Medical Journal* on the parasitic doctrine of epidemic cholera, fully accepts the conclusions of Koch, and believes that: "We are entering upon a revolutionary period in the progress of medicine. Hereafter this present period will be cited as the commencement of an important era in medical history. The progressive advancement of our knowledge of the causes of infectious diseases will revolutionize not only ætiology and pathology but therapeutics."

From the last journals we learn that several physicians in Barcelona inoculated themselves with an attenuated cholera virus, which gave rise to a mild affection; a repetition of the experiment

nine days after had no effect. Rabbits inoculated were not affected subsequently by double the dose which was found to be fatal to unprotected individuals. Later in Valencia, Spain, Dr. Ferran has inoculated over 6000 persons, some having died, the Spanish Government have prohibited further inoculations, and appointed a commission of enquiry who are now at work. As the comma bacillus has not been discovered in the blood it will be interesting to learn the method adopted by him, and what measure of protection it has afforded, if any. The principle of securing immunity against infectious diseases by inoculation with an attenuated virus may yet prove to be one of general application, but whether its adoption could become practicable is among the problems of the future.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Professor Gyn. B. C.

Ruptured Perineum.—This subject has been occupying the attention of Prof. Carstens, of Detroit Medical College, and we are indebted to him for some very important facts connected with the successful treatment of a freshly-ruptured perineum. It is well known that failure not unfrequently follows the operation when made upon the patient immediately after her accouchment. Dr. C. has observed that this failure is due to the infiltrated state of the tissues, which rapidly subsides, and leaves the sutures loose and allows the edges to separate. To overcome this difficulty the writer waits for 24 hours before introducing the sutures, and then secures the silver sutures by a compressed shot, having previously placed some 5 or 6 shots on the wire. Each day he tightens the ligature and clamps the last shot, thus securing perfect coaptation till union has taken place.

PRECOCIOUS MENSTRUATION, ETC.

Dr. Gautier, in the *Medical Abstract* for Feb., of this year, gives some interesting facts connected with hemorrhages from the genital organs in very young girls. Genital hemorrhage, he states, is not unfrequently met with in new-born children between the 1st and 9th days, generally, however, between 3rd and 6th day. The flow commences as a mucous discharge which becomes bloody, though the amount escaping (seldom exceeding 3 ii. ss.) does not weaken the child or

induce those blood changes which follow internal hemorrhages.

The cause of the hemorrhage is probably due to a catarrhal congestion of the vessels of the mucous membrane of the vulva and vagina which goes on to hemorrhage as in catarrhs of other mucous membranes.

As to treatment, having carefully examined the condition of the anus, bladder, intestines and urethra to ascertain the cause of the hemorrhage. When found to be due to enfeebled health, our attention should be directed to building up the child's health by good food, fresh air, etc., while at the same time the vulva is kept scrupulously clean, and the vagina syringed out whenever accumulations of blood or mucus exist.

Dr. G. gives the statistics of 24 cases of precocious menstruation apart from premature corporal development; of these cases 5 occurred during the first year, some of them during the first 7 days of life, the balance of the cases are about equally divided between the second year and the seventh year. In all his cases the flow was periodical and generally preceded by regular catamenial phenomena, without, however, the development of the breasts or hair over the pubes.

This form of hemorrhage is not regarded by Dr. G. as having any connection whatever with ovulation.

The Dr. then gives notes of 41 cases where there was precocious menstruation with other signs of puberty; of these 41 cases 19 were met with in the 1st year of life; 9 in the 2nd year; 11 between the 2nd and 6th years. Some of these became pregnant at the 8th and 9th year. One child menstruated at the 9th month, but never became pregnant, and another case where menstruation began at 2½ years of age, became pregnant 9 times. One case where menstruation began at 2 years of age became pregnant at 8, but ceased to grow then, and never conceived again.

The author points out the fact, which it is well to bear in mind, that hemorrhage from the genitals is frequently due to tumors of these parts e.g., vegetations or polypi of vagina or sarcomata. The uterus is seldom affected, while the ovaries are often diseased. These genital hemorrhages (*i. e.*, due to tumors of the genitals) seldom interfere with the regularity or amount of the menstrual flux.

Ovarian tumors, when of a dermoid nature, retard or prevent menstruation, but if of a sarcomatous nature often are accompanied by the regu-

lar uterine hemorrhages associated with precocious development of the internal and external genital organs and hypertrophy of the mammary gland.

Progress of Science.

PNEUMONIA IN YOUNG CHILDREN.

By L. EMMETT HOLT, M.D., Attend. Phys. to Children's Dep. of Northwestern Dispensary, New York, Instructor in N. Y. Polyclinic.

In a paper published in the *Medical Record*, Feb. 14 and 21, 1885.—Dr. Holt uses the terms lobar and broncho-pneumonia, instead of croupous and catarrhal, or lobular, to designate the two varieties; while broncho-pneumonia is the form essentially peculiar to early life, the lobar variety occurs often enough to demand a portion of our consideration.

Regarding the *seat of the disease*, the order of frequency is, first, the right apex, second, the left apex; third, the left base; fourth, the right base.

Physical signs.—Generally speaking, these do not differ essentially from those in the adult. The subcrepitan r le, is more frequent than the crepitan; in fact, the latter I have rarely heard.

It is extremely difficult, well-nigh impossible in an infant, to examine the supra- and infra-clavicular and the high axillary regions satisfactorily and thoroughly with the naked ear.

Diagnosis.—Although in most cases this is easy, it presents in some very great difficulty during the first two or three days before positive signs of consolidation appear.

Practically I have found lobar pneumonia difficult to distinguish from scarlet fever, typhoid, meningitis, tonsillitis, malarial fever, pulmonary congestion, and broncho-pneumonia.

The invasion of pneumonia and scarlet fever are very similar. We must wait for the physical signs of the one or the rash of the other before pronouncing a positive opinion.

The cerebral symptoms of pneumonia are rarely so intense, so prolonged, so continuous, or so progressive as those of meningitis, although almost every individual symptom of the one may be present in the other.

The onset of malarial fever and pneumonia are very similar; both usually begin abruptly with vomiting, convulsions, or a chill; in both we have the sudden rise of temperature to from 103° to 105° F.

BRONCHO-PNEUMONIA.

By this term I understand an inflammation which affects the mucous membrane and the walls of the bronchi, the air-cells, and the interstitial tissue of the lung. The bronchial element predominates, in fact, forms the characteristic feature.

All the latest writers upon the pathology of this disease agree that we can no longer draw the line between broncho-pneumonia and that condition formerly described as capillary bronchitis.

The terms are used synonymously. This form is spoken of as generalized, diffuse, or disseminated pneumonia.

The sexes in broncho-pneumonia are about equally affected.

The clinical picture presented by broncho-pneumonia is a decided contrast to the lobar form in most of the prominent features. It is nearly always secondary; attacks children debilitated by previous disease; its onset is gradual; it rarely terminates by a crisis, and has no typical course.

When it supervenes upon an attack of bronchitis it may be so gradually that it is difficult to tell exactly when the extension took place.

Physical signs—It is upon *auscultation* that we must mainly rely in the diagnosis of this disease.

The sibilant r le is usually the first sign in the the generalized or "suffocative" cases. Vesicular breathing may be almost absent from the obstruction in the bronchi. These r les, when thus generalized, are replaced in a day or two by mucous clicks and moist r les of all sizes equally diffused. These may be the only signs during life.

Absence of vesicular breathing does not always mean hepatization. It may be due to great obstruction in the bronchi with collapse of the air-cells, or to congestion. Pure bronchial breathing, such as is heard in lobar pneumonia, does not usually exist. When it does it is combined with other signs which are found in that disease.

When a consolidated area exists in one lung the transmission of the sounds to the opposite side may be so distinct as to lead to the supposition of disease there. Percussion usually enables us to correct this mistake. In all cases the signs vary greatly from day to day, changing with the depth of the respiration, the position of the child, etc. Repeated examinations are always necessary before pronouncing positively in regard to the condition of the lungs.

How does broncho-pneumonia terminate?—Of the fatal cases the vast majority die during the acute stage. Of those who survive this period by far the greater number resolve in from three to four weeks where consolidated areas of considerable extent have been formed. In these it is necessarily much slower than in lobar pneumonia, where the inflammatory products are wholly or chiefly within the alveoli and the bronchi.

What becomes of those cases (by no means few in number) which at the end of six weeks or two months have shown little or no tendency to resolve, the physical signs remaining as they were during the height of the disease. Three answers may be given: (1.) They may become tubercular. (2.) They may terminate in chronic fibroid induration. (3.) They may recover perfectly.

First, then, in regard to *tuberculosis*. Is it common for a simple broncho-pneumonia to terminate in tuberculosis. We may, I think, safely take the ground that a case of unresolved broncho-pneumonia is extremely unlikely to develop tuberculosis, if there has been beforehand no sufficient grounds for believing the patient to be tubercular.

Secondly, fibroid induration.—The greater the duration of the disease the more marked are the changes, and the acute process may pass into a chronic one, with the production of new connective tissue. These patients may live on indefinitely.

Thirdly, complete recovery.—I use the word in a clinical sense, not in an anatomical one. By recovery I understand a condition in which the lung performs its functions normally, so far as we can judge from the patient's symptoms.

That it is possible for a lung in which consolidation from broncho-pneumonia has existed for several months to return to a condition in which no changes would be apparent under the microscope, I doubt very much. Using the term in the sense defined, I believe that the greater number of these cases ultimately recover perfectly.

Diagnosis.—Is it possible to make a diagnosis between lobar and broncho-pneumonia, and, if possible, is this of any practical value? I answer both these questions in the affirmative. In the matter of prognosis it is of very great importance.

In the vast majority of cases, the two diseases can be distinguished by the symptoms and physical signs.

Treatment.—I have not much faith in drugs in the management of pneumonia in children. I have tried most of those usually recommended very extensively, and am able to speak quite positively of what they do not do. Quinine and the other cinchona alkaloids, I believe, have little effect in aborting the disease, shortening its course, or in reducing the temperature.

Aconite in the very beginning of lobar pneumonia I have used considerably in very small frequent doses, and I have seen enough benefit from it to encourage me to continue in its use.

The treatment I have finally settled upon can be briefly summarized in a few words: *nourishment, opium, alcohol, local applications*.

If the child be at the breast it should be kept there, care being taken that it be not nursed too frequently.

Opium I believe to be worth more in acute pneumonia than all other drugs combined. It quiets the restlessness, relieves the pain and the cough, and perhaps more important than all, sustains the nervous system under the strain which the disease produces, and in this way seems to exercise a beneficial effect upon the inflammatory process. Of late I have used a great deal, and have come to prefer the tincture of opium and ipecac, or the liquid Dover's powder to any other preparation of opium; it may be given in drop doses at the same intervals.

Alcoholic stimulants in a large number of cases of lobar pneumonia are never needed. In broncho-pneumonia they are often required from the outset. They should be given fearlessly, but of course intelligently.

Local applications.—Poultices, unless *very carefully, intelligently, and conscientiously* applied are capable of doing quite as much harm as good.

Their efficiency is much increased by the addition of mustard.

To promote resolution in broncho-pneumonia in addition to the usual internal remedies employed, cod-liver oil, iron, etc., I have been in the habit of keeping up a mild counter-irritation over the chest by iodine or friction with some stimulating liniment.

A LINIMENT FOR EARACHE.

Pavesi recommends a liniment composed of camphorated chloral $2\frac{1}{2}$ parts, pure glycerine $16\frac{1}{2}$ parts, and oil of sweet almonds 10 parts. This is to be well mixed and preserved in an hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.

INDUCTION OF PREMATURE LABOR.

By T. GALLARD THOMAS, M.D.,

Prof. of Gynæcology, Coll Phys. and Surgs., New York.

From a lecture published in the *Med. ad Surg. Reporter*, Feb. 14, 1885, we abstract the following:—The method of inducing premature labor which I now invariably adopt is very simple, and, at the same time, a perfectly efficient one. The patient is placed across the bed, with the buttocks resting near the edge, and under her is arranged a large piece of rubber or oil-cloth in such a way as to drain into a tub below on the floor. In this tub we put one or two gallons of water of a temperature of 98° F. The operator stands between the thighs of the patient, whose knees should be properly supported and employing a syringe with a long nozzle, which is carried up as far into the cervical canal as it will go, he keeps a steady stream directly against the membranes.

In the course of ten minutes the os will be the size of a silver half dollar, and when dilatation to this extent has been accomplished, he is to insert a gum catheter between the membranes and the uterine walls. The patient is then put in bed, and that is all.

This operation constitutes one of the greatest advances that have ever been made in the obstetric art, and it is certainly no mean triumph to be able thus to preserve a human life which, without its aid, would have been inevitably lost. I can point to at least two dozen children in this city, who by this means were saved from an untimely fate. When the infant has been delivered before full term, it should not be washed and otherwise treated in the ordinary manner of nurses, but should be carefully wrapped in warm cotton and allowed to remain in it; the temperature of the room in the meanwhile being brought up to nearly one hundred degrees.

ON THE TREATMENT OF THE GRAVER FORMS OF ACUTE BRONCHITIS.

By I. BURNEY YEO, M.D., F.R.C.P., Physician to King's College Hospital.

We will next consider the treatment most appropriate to the graver forms of acute bronchitis: to those cases in which the catarrhal inflammation is diffused over a great extent of the bronchial mucous membrane, and affects not only the larger tubes, but those also of medium size, and sometimes even the smallest ramifications. Such cases when they occur, even in vigorous adults, are very grave and require most careful management: but when they occur, as they often do, in young children or in old and feeble persons, they are attended with the greatest danger.

When the finer bronchial tubes become attacked and their calibre is diminished by the inflammatory swelling of their lining membrane, and when many of them become blocked up by the accumulation in them of viscid secretion, you can readily understand how imminent must be the danger of death by apnoea. Let us ask ourselves what are the objects we have in view in the treatment of such cases? They are these:—(1) To diminish the inflammatory hyperæmia and swelling of the bronchial mucous membrane. (2) To thin and liquify the catarrhal secretion when it is dry and scanty. (3) To lessen it when excessive. (4) To promote its expulsion from the air passages and so obviate their obstruction. (5) To allay excessive sensibility of the bronchial mucous membrane. (6) To maintain and promote the circulation in the lung, and prevent pulmonary venous engorgement and distension of the right side of the heart. (7) To reduce fever and maintain the general strength.

The several details of treatment by which these indications may be carried out will have to be modified and adapted to individual cases. Much will necessarily depend on the age and vigor of the patient, as well as on the stage which the disease has reached when it first comes under treatment. Remedies most appropriate in the

earliest stage, and in a young and vigorous adult, might be altogether unsuited to more advanced sages, to a young child, or to an old and feeble person.

We will first consider the treatment of a severe attack of acute bronchitis in a young and robust adult seen at its onset. As in milder cases the patient's room must be kept at an equable temperature of about 65°, and the air of the apartment must be kept moist and unirritating by the free diffusion through it of the vapor water. If there is much oppression of breathing, and a sense of dryness and pain referred to the upper part of the sternum, the withdrawal of a little blood by means of a half-a-dozen leeches applied over the sternum will be a judicious measure, and with this may be associated dry cupping over the back of the chest and in the interscapular region. This measure will constantly afford much relief in robust persons when the dyspnoea and sense of oppression are severe. In most cases it will be advisable to apply large linseed and mustard poultices over the front and back and chest; and when the skin is too tender to allow of further counter-irritation, a hot jacket-poultice of linseed meal must be used instead.

Of internal remedies I am quite of Stoke's opinion that "there is no remedy that possesses such a decided power over acute bronchitis" as tartarised antimony; but its success depends much on its early administration: when the bronchial mucous membrane is dry and tumid, and before secretion has become abundant, and when the skin is hot and dry, and the pulse hard and frequent. It should be given in small repeated doses, combined with other diaphoretics and with opium.

Warm alcoholic drinks must be given to keep up the force of the circulation, while, at the same time, they favor diaphoresis, reduce fever, and promote expectoration. Two or three ounces of hot milk or whey, with an equal quantity of seltzer or soda water, and a tablespoonful of brandy or whiskey should be given every three or four hours.

Free evacuation of the bowels should be regularly obtained so as to favor the descent of the diaphragm, and afford as complete expansion of the lungs in breathing as possible; and by unloading the portal system of veins, any tendency to distension of the right side of the heart is to that extent relieved.

It is necessary to insist strongly on the importance of using the greatest discretion in the administration of opium in these cases of severe diffused acute bronchial catarrh. The more diffused the catarrh, the more cautious must we be in the administration of opium. In old people and in young children opium is scarcely admissible, and even in adults, where there is much obstruction to the entrance of air into the lungs from the abundance of secretion in the air passages, opium is a very dangerous remedy. The

effect of opium is to check cough and diminish secretion; the former it does by lessening the sensitiveness of the bronchial membrane, and the latter by modifying the capillary circulation in it. But in cases of "suffocative" bronchitis, while we might desire to diminish the secretion, we dare not deaden the sensitiveness of the bronchial mucous membrane, or do anything to check the cough. We depend upon the cough to clear and set free the obstructed air passages, and we only desire to make it more efficient to this end.

It is extremely important to bear this in mind with regard to the use of opium in bronchial catarrh; a dose of opium given injudiciously may produce a fatal somnolency, quiet the cough, and block up the air passages. If you give opium at all in such cases, give it only in very small doses, and only when the patient is watched by some thoroughly trustworthy person; but never give it at night to produce sleep, however trying the cough may be, or however urgent the patient or the attendant may be for a sedative.

Remember that opium is rarely ever admissible in the severe diffuse bronchial catarrhs of old persons and young children. When it is very necessary to secure a few hours' sleep, it is better to give from 5 to 20 grains of chloral, with an equal quantity of bromide of potassium or sodium.
—*Medical Times and Gazette.*

WHO OWNS THE PRESCRIPTION?

This question has been asked so many times that it is now in order to set it at rest forever. The Supreme Courts of Massachusetts and of New York have ruled as follows:

"The question before the Court seems to be very simple, indeed. A patient applies to a physician and receives from him certain advice, for which he tenders a fee. The physician hands a piece of paper to the patient, purporting to be a *written order* for certain goods, called drugs, which order is filled by a merchant or apothecary. The payment of the fee, and the delivery of the goods, or drugs, terminates the verbal contract, and the druggist keeps the prescription as evidence that the *contract* has been fulfilled, as far as he is concerned. The druggist can, if he so *please*, on his own responsibility, renew the drugs, for he is but a merchant, and has a *perfect right* to sell drugs to any one and in any shape. He need not keep the prescription, nor is he bound to give a copy, but, should error occur, he has no protection in case of suit."

From this it would appear that a prescription is but an order for drugs, and the delivery of the drugs *settles the matter.*



ARTIFICIAL SEA AIR.

Many, indeed, are the luxuries that the magician's wand of invention now brings into the midst of our homes. As an instance, to produce a sea atmosphere for the sick room, a foreign contemporary suggests the use of a solution of peroxide of hydrogen (10 volumes strength) containing 1 per cent. of azonic ether, iodine to saturation, and 2.50 per cent. of sea salt. The solution placed in a steam or hand spray diffuser can be distributed in the finest spray in the sick room at the rate of two fluid ounces in a quarter of an hour. It communicates a pleasant sea odor, and is probably the best purifier of the air of the sick room ever used. It is a powerful disinfectant, the same author writes, as well as deodorizer, acting briskly on ozonized test solutions and papers. It might be well to test the subject in some ward of one of our hospitals.—*Scientific American*.

PILOCARPIN IN ERYSIPELAS.

During a recent lecture, Prof. J. M. Da Costa called the attention of the class to a new method of treating erysipelas by hypodermic injections of pilocarpin. This method, though new to the profession, has been used at various times during the last five years by Prof. Da Costa with good results. In the case presented before the class the action had been marvelous. The patient was admitted to the hospital two days before with a rapidly developing erysipelatous inflammation, due to a bruise received the previous night in a political altercation. His eyes were completely closed, his face was much swollen, red, and burning, and his temperature 102.8°. In addition, he had slept out all night exposed to the weather, and had evidently imbibed a superabundance of alcohol. It seemed to Prof. Da Costa that the chloride of iron treatment would be too slow in a case of this kind, so rapid in its progress, especially as it was one of the type in which cerebral complications are liable to occur. He accordingly ordered pilocarpin gr. 1-6, to be injected hypodermically. The result was more gratifying than had even been anticipated. In a short time profuse sweating had begun, which had lasted for an hour and a half. During the sweating the temperature fell to 99°. The further development of the inflammation was stopped. The effusion rapidly subsided, and when the patient appeared before the class there was not a trace of the disease left.—*Med. World*.

A PRACTICAL POINT IN THE TREATMENT OF PLEURAL EFFUSIONS.

Dr. Broadbent (*Lancet*), in a clinical lecture, says that when he hears a distinct bronchial breathing generally over the chest in cases of pleural effusions, he feels sure that a consolidated

lung is immersed in the fluid, and he consequently does not tap unless the symptoms are so urgent as to demand interference. A solidified lung cannot, of course, expand as does one which is simply collapsed or even compressed, unless it is bound down by adhesions; and experience has shown him that on the resolution of the pneumonia the fluid is usually rapidly absorbed.

He seems to hold the sound views that with grave symptoms a pleural effusion should be withdrawn, whatever the complication; that the course of moderate effusion may often be shortened by tapping; but that, if the lung be consolidated—one evidence of which is the persistence of bronchial respiration over a whole or a large part of the chest—it is better to wait, if the condition of the patient warrants such a course.—*Boston Medical and Surgical Journal*.

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick-headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*N. Y. Med. Journal*.

ASTHMA.

Dr. Faulkner (Pittsburg) treats the paroxysms of asthma successfully by the application of tincture of iodine along the course of each pneumogastric nerve in the neck.—*Col. and Clin. Record*.

ABSENCE OF VAGINA, UTERUS, AND OVARIES IN AN APPARENTLY WELL-BUILT WOMAN.

In the *New York Med. Jour.* Dr. Henry J. Garrigues reports an abstract in this case. He publishes the case because it was usually said that there should be some signs pointing to such a condition in the appearance of the patient; especially that there should be a weakly, imperfect general development, absence of the mammæ, &c., but in this case there were absolutely no such signs. Even on examining the external genital organs one would have supposed the patient to be quite normally developed; it was only on searching for the vagina that he discovered the condition described.

The case was also interesting as showing the manner of natural development of the vagina and uterus. One point which had puzzled him a little was the history of the monthly molimen, for he had been unable to find any trace of ovaries. The

patient, however, had some headache and general malaise almost constantly, and we could easily imagine that these symptoms might be increased a little every month.

The question might arise whether he was warranted in telling the patient that nothing could be done for her. Of course, if a uterus had been found, the treatment would have been to make an artificial vagina; but would it be proper to make an artificial vagina for the sole purpose of coition? He thought not; the woman would be exposed to much danger thereby. The operation itself would be dangerous, and the act of copulation in this artificial canal would expose her to constant danger.—*Med. & Surg. Reporter.*

[In this case the woman was no doubt better built than her clinical history. A woman with all the outward characteristics of her sex, but without ovaries, uterus, or vagina is a specimen heretofore unheard of. Were this case exactly as represented in the above history the views of gynæcologists regarding the relations of the sexual organs to the general organization would require to be modified. We may, however, be permitted to say that because Dr. Garrigues did not find the ovaries in a woman without a vagina is not sufficient proof that these organs did not exist.].—A. J.

CHOLERA INFANTUM.

Dr. J. Lewis Smith (*N. E. Med. Monthly*): ℞. Tinct. opii, gtt. xvj.; Spts. ammon. aromat., ʒ ss. to j.; Bismuth subnitrat, ʒ ij.; Syr. simplic. ʒ ss.; Mistur. cretæ. ʒ iss. M. Sig.—One teaspoonful every two or three hours to a child of eight to twelve months, until vomiting and diarrhoea are controlled.

CHOLERA VACCINATION.

We find in *La Independencia Medica* of Barcelona, of March 1 and 11, 1885, the details of some interesting experiments by Dr. Ferran relating to the personal prevention of cholera. Dr. Ferran has been making a very exhaustive study into the natural history of the comma bacillus, and it is claimed for him, by Dr. Serenana and others of his disciples, that he has followed this microbe through all the phases of its existence, and has found it in certain periods of its evolution under forms never before described. But he has also been experimenting in the direction of the attenuation of the virus of cholera, in order, by inoculation with it, to produce a modified form of the disease which shall secure immunity for the subject from the graver scourge. It cannot be asserted that this object has as yet been obtained, nevertheless the results thus far observed are by no means such as to make the learned naturalist despair of success.

The first to submit himself to this somewhat hazardous experiment was Dr. Serenana, who, on

February 23d of the present year, received an injection into each arm of half a cubic centimetre of the attenuated virus. In less than three hours, he states, he began to experience severe pain in the posterior region of the arms, which gradually increased and rendered movement of the limbs difficult. At the end of seven hours he had a slight chill, accompanied by a feeling of general languor, elevation of temperature, rapid pulse insomnia and headache. This condition remained for a little more than twenty-four hours, when there was a rapid abatement of all the symptoms, both local and general. Dr. Jacques was the second to receive the virus, and although he was injected in one arm only with half a cubic centimetre, his symptoms were even more pronounced than those of the first experimenter, and he also had slight cramps and nausea. Dr. Bertram, of Rubio, likewise submitted to the injection and experienced similar effects. An examination of the blood eighteen hours after inoculation, revealed the presence of micrococci, said by Farran to be the first form assumed by the comma bacillus when injected into the living organism.

At the expiration of nine days two of these persons submitted to a re-inoculation with negative results, while four others, who received primary inoculations with the same attenuated virus at this time, suffered from symptoms of considerable intensity. About two hours after the inoculation pain was felt in the arms, and toward evening, the injection having been practiced shortly before noon, the temperature rose, the pulse increased in frequency, there were headache, languor, slight chills, and nausea. Later there was a rapid fall of temperature, and the hands and feet grew cold and presented a marbled appearance. At the same time the headache and nausea increased and were accompanied by complete anorexia. Some of the subjects had also slight cramps in the calves of the legs. In about forty-eight hours all these symptoms had passed away. The highest temperature recorded was 102° F., and the pulse 125.

It must be confessed that these phenomena bear considerable resemblance to those of Asiatic cholera, and they are the more remarkable when it is remembered that an injection of the same virus, in identical dose, produced absolutely no results in two individuals who had been inoculated some days previously. These experiments must of course be repeated many times, and in the presence of an actual epidemic of cholera, before they can be accepted as in any degree conclusive. But, if the cable reports truly, the disease has already reappeared in Spain, and Dr. Ferran will now have an opportunity to put his experiments to the crucial test. In the presence of the unsatisfactory state of cholera therapeutics we can but hope, faintly though it may be, that a second Jenner has arisen in Spain, and that we may yet see cholera relegated to the position of small-pox, as no longer a scourge to be dreaded by civilized communities.—*N. Y. Med. Record.*

A METHOD OF AVERTING SYNCOPE.

It is well that we should always be prepared to avert what may or may not prove to be a serious, or even fatal syncope. In persons whose hearts are weak, fainting or syncope is not at all uncommon, and may be produced by very slight causes. Hence we reproduce the concluding paragraph from an article on the subject by Dr. William J. Nottley, in the *Lancet*, March 14, 1885:

"Now, in all cases where the syncope is not complete, and where the heart continues to act, though feebly, measures are taken to restore the patient by adopting such means as are calculated to strengthen the action of the heart and facilitate the flow of blood to the brain. In many cases a person accustomed to faint from slight causes will be able to avert the syncope by adopting such means, and it is for this purpose that I wish to draw attention to the efficacy of heat applied to the head. In a person with a weak heart, syncope may be produced by simply sitting with the feet in hot water, and in like manner, it may be averted by application of heat to the head. Any one may convince himself of this by first producing faintness in himself artificially. This may easily be done by getting into a bath of about 110° F. In a few minutes he will begin to feel faint. Let him then plunge the whole of his head except the nose and mouth beneath the surface of the water, and in less time than it has taken to bring on the faintness all the disagreeable sensations will cease, and he will now be able to continue in the bath, perhaps for half an hour longer, without any inconvenience. From this it would appear that the application of heat to the head is a measure of some value in averting a threatened attack of syncope."—*Med. and Surg. Reporter*.

A NEW PROCEDURE FOR THE GOITRE.

Dr. Weiss, of Meiningen, publishes, in the *Berliner Klin. Wochenschrift*, his results of the employment of a new method for the cure of goitre, of which the following is a brief account:

The growth is lightly touched with an awl-shaped Poquelin burner which is heated to a white heat. The application is made by tracing horizontal lines from right to left, beginning above about one centimetre apart; under this another row of lines made about three centimetres long, until the entire tumor is covered. The burnt points are soon covered by a crust, and in the course of six days there is nothing remaining but a red cicatrix. The procedure, when the burner is heated to a white heat is not very painful, since it is carried out so rapidly. Few patients refuse the application without ether, even the employment of a local anæsthetic is superfluous. The after-treatment is quite simple, a layer of cotton may be placed over the tumor to hinder the cloth-

ing from irritating. In the course of six to eight days the operation may be repeated until the tumor has disappeared. The rapidity with which this occurs is largely dependent on the size, nature and age of the tumor. It may have to be repeated from six to twelve or more times. In certain cases the conjoined administration of small doses of iodide of potassium seems to hasten the success, but in reality it is not required, since the author reports some cases where the smallest doses of the drug caused rhinitis, while the final result, nevertheless, was good. The procedure proved to be most efficient in simple endemic goitre, while the cystic growth required a longer time to disappear. In the latter class of cases Weiss is not yet prepared to say positively whether the cure was complete, since his data are too recent. If the physiological action for this treatment is asked for the only explanation that can be given at present is the suggestion that the irritation causes a contraction of the muscle walls of the vessels, which cuts off the nutrition to the hypertrophied glandular substance, which causes a gradual disappearance of the tumor. In cases even where the growth was covered by a network of enlarged veins the results of this kind of treatment was marked and rapid. Weiss has not had an opportunity of applying this method in varicose veins, but he has no doubt but what the method will bring about a rapid contraction of the much dilated vessels.

THE TREATMENT OF RINGWORM.

Alder Smith, M.B. (*British Medical Journal*), gives the following: I desire now to call attention to a treatment for recent ringworm, where it does not extend over any large extent of surface. It is not a new remedy by any means, but, I believe, a new way of naming a well-known parasiticide. I have been trying for some time to find out what vehicle penetrates most deeply in the hair follicles, and think it is chloroform. Chrysophanic acid is a very good parasiticide and, though it is insoluble in spirit and ether, yet it is soluble in chloroform. Chloroform also dissolves the fatty matter out of the hair follicles, and thus allows the parasiticide dissolved in it to penetrate deeply. During the last year I have used a solution of seven grains of the acid to the ounce of chloroform to all cases of recent ringworm, and believe it is the most efficient treatment I have yet tried. The small patches should be carefully marked out by cutting the hair very closely on them and the chloroform solution should be well pressed and dabbed into the places with a minute sponge-mop for five minutes, two or three times a day, according to the amount of irritation produced. The aim of the treatment is not to produce scabs, but to get the solution to penetrate deeply. The sponge-mop should not be much larger than a big pea, and should be continually dipped into the chloroform bottle, as the solution soon evaporates, whilst it is pressed into the dis-

eased spot, and leaves the yellow acid dry on the place. Great care must be taken that the solution does not run on to the forehead or into the eyes, and that the person using it does not inhale the vapor. I always give full directions about the care necessary in using such a potent remedy; and only employ it to weak places of the disease. It is well for the nurse to keep her face away from the sponge, and to use the chloroform in a current of air, and not in a small room. The places should be well washed every morning with hot water and soap, to remove any sebaceous matter or crusts, and the hair should be kept closely cut on them till the new hair appears, which is generally in about two or three months, but the remedy should be continued till all the diseased stumps have come out.

EXTERNAL APPLICATIONS OF ETHER FOR VOMITING.

The *Paris Medical* credits Dr. Galcedan with this suggestion. In a case of obstinate vomiting during pregnancy, after every remedy had been tried in vain, he applied some either directly to the skin of the epigastrium. The effect was surprising; the patient inspired deeply several times, and ceased vomiting at once. Whatever may be the explanation of its action, this mode of treatment is certainly worth an extended trial.—*Medical Herald*.

INCONTINENCE OF URINE.

In a lecture on diseases of children, published in the *Medical Press and Circular*, Robert Lee, M.D., draws a distinct line between that form of urine which occurs in the night and that which occurs in the daytime. He says Trousseau first pointed this out, and showed that belladonna acted promptly when the incontinence occurred at night, and not so well where the trouble persisted through the day. In these cases there is a partial paralysis of the sphincter, and strychnine gives the best results.—*Louisville Med. News*.

ERGOT IN THE TREATMENT OF COUGH.

Dr. Allan (*British Med Journal*) reports fifty cases of pulmonary affections in which cough was a distressing symptom. He generally employed subcutaneous injections of ergotin. The dose is not mentioned. In most instances signal relief was obtained.—*N. Y. Medical Journal*.

A NEW REMEDY FOR DIPHTHERIA.

It is to Germany that we are indebted for this efficacious and simple treatment, which consists of large doses of oleum terebinthinæ rectificatum. Different writers have highly extolled it, and ascribe to it actions which seem almost miraculous.

It would appear that scarcely half an hour after its administration a bright scarlet tint begins to encircle the diphtheritic exudation, gradually increasing in size, at length it completely envelops and replaces the false membrane.

Authors, who have been liberal in their praise, affirm that within twenty-four hours after the ingestion of the remedy the disease has wholly disappeared, leaving hardly a trace.

The treatment, however, seems to be attended by such marvelous success and promptness of effect only when the disease is in the first stages; nevertheless, even after the disease has existed for several days, it exerts, though not as promptly, a decided curative action, and hastens the ultimate recovery. The dose, which is best given immediately after meals and in a little warm milk, ranges from a teaspoonful for children to a tablespoonful for adults, morning and evening.—*Journal de Thérap.*

A VALUABLE REMEDY FOR HEADACHE.

We desire to call attention to a simple, and at the same time wonderfully efficient, treatment for many kinds of headache. We lay no claims to originality, nor do we know who the originator was, but having used it for a year or more, and in many cases with remarkable results, we feel disposed to give it our indorsement, and desire to make it more generally known. The remedy is nothing more nor less than a solution of the bisulphide of carbon. A wide-mouth glass-stoppered bottle is half filled with cotton or fine sponge and upon this two or three drachms of the solution are poured. When occasion for its use occurs the mouth of the bottle is to be applied to the temple or as near as possible to the seat of pain, so closely that none of the volatile vapor may escape, and retained there four or five minutes or longer. For a minute or so nothing is felt, then comes a sense of tingling, which in a few minutes—three or four usually—becomes rather severe, but which subsides almost immediately if the bottle be removed, and any redness of the skin that may occur will also quickly subside. It may be re-applied, if necessary, several times in the day, and it generally acts like magic, giving immediate relief.

We believe this was the basis of a once popular nostrum. The class of headaches to which it seems especially adapted is that which may be grouped under the broad term of "nervous." Thus neuralgic, periodic and hysterical headaches are almost invariably relieved by it. True, the relief of a mere symptom is quite another thing from the removal of its cause, yet no one who has seen the distress and even agony caused by severe and frequently recurring headaches (and who has not?) but will rejoice to be able to afford relief in so prompt and simple a manner, besides it is sure to secure the hearty gratitude of the patient.

if he has suffered long. As to the *modus operandi* we have nothing more definite than a theory to offer, and that is that the vapor being absorbed through the skin produces a sedative effect upon the superficial nerves of the part to which it is applied. We know by experiment that its influence is not due to its power as a counter-irritant. We however know that it does act, and if we do not clearly see in what way it acts that it is no more than can be said of several other remedies which are firmly established in professional favor and confidence.—*Physicians and Surgeons' Investigator*.

INGROWING TOE-NAIL. DEFINITION.

A chronic, painful, traumatic inflammation of the tissues at the margin of a toe-nail. The inflammation is usually attended with the formation of granulations and with suppuration, and it is nearly always of the great toe-nail, usually on its outer side. There is a form of so-called in-growing toe-nail which is not attended with suppuration, but is dependent on an accumulation of epidermic scales between the nail and the flesh; and very rarely the disease may exist in one or other of the lesser toes.

CAUSATION.—In civilized countries, we must always recognize the element of compression, or at least prevention of expansion inside a boot. It is perfectly conceivable that the condition might exist in individuals who never wear boots, but for practical purposes we must take the boots for granted. They are a constant concomitant and, if not a prime, are probably a contributing, cause. It is however, a cause which we cannot remove. We must treat the toe inside the boots. Indeed, the patient will probably have removed the cause long before we see him. Looking beyond the boots, we find that the causes may be arranged as intrinsic, or depending on peculiarities in the toe or nail, and extrinsic, or dependent on the direction of the toes or the condition of outlying structures in the foot.

1. **INTRINSIC**, *i.e.*, in the nail, or in the surrounding tissues, or in both.

1. *In the nail.* In some people the nails in the fingers and toes—and I have noticed that the peculiarity is usually coincident—are convex or arched, and lie dip deeply into the surrounding flesh. In such cases, in paring the nail of the great toe, it is difficult to carry the knife or scissors completely round, and thus there is frequently left behind a small spicule or pointed piece, which readily insinuates itself into the neighboring flesh. Matters are sometimes made worse by pulling at this piece, "tearing it to the quick." The flesh swells and conceals this small piece of outlying nail; it is overlooked, sets up irritation, and the condition is deepened.

2. *In the flesh.* Some people have a redundancy of flesh in their toes, and their fingers as well. In these the flesh overlaps the nail, and in the foot the confinement of the boot, added to the

soddening perspiration under the overlapping flesh, readily starts the condition. Once started it continues, and suppuration along the margin of such a toe may continue for years. Fortunately, it is the least painful, and most easily treated of all the varieties.

3. *In both nail and flesh.* The existence of both the above conditions—an arched toe-nail and an excess of soft tissue—will frequently be found associated with the malady. Alone, or in combination with extrinsic causes, this double condition, with the mere wearing of boots, is almost enough to cause this complaint. In this case, also, it is not likely to be severe.

2. **EXTRINSIC**, or from causes lying outside the nail and its surrounding tissues.

1. *Flattening of the arch of the foot.* Flatfoot, in varying degrees, I believe to be the most important cause of in-growing toe-nail, and all the more so that the ordinary modes of treatment are futile to cure it. It acts in this way through the attempt of the point of the great toe to become the anterior pillar of the arch of the foot—the natural support of the latter, *viz.*, the pad at the root of the toes, particularly of the great toe, not being available on account of relaxation and perhaps painfulness of the plantar ligaments. But constant use of the toe in this wise induces hypertrophy of its tissues and consequent overlapping of the toe-nail. By easily understood stages this hypertrophy becomes irritation, inflammation, and suppuration where the flesh is crowded over the edges of the nail, and we thus get the condition fully developed.

It is simple flat-foot, *pes planus*, and not splay-foot, or *pes valgus*, which is most likely to start the mischief. And it has seemed to me that not the worst cases of flat foot—those which require operation—but the moderate cases, which require no special treatment for the flattening, are chiefly associated with in-growing nail.

2. *Eversion of the great toe.* The production of this condition, I believe, will be most frequently found to depend either on a habit of walking with the limb much rotated outwards, or on a congenital deflection of the toe itself. This too great proximity may merge into a passing beyond, and then we have the second toe, perhaps with the third, overriding the great toe, and evidently causing the complaint.

3. *Inversion of the lesser toes.* In this case the same result as the preceding is produced by a deviation inwards of the second and third toes. How it is produced I do not know.

TREATMENT I.—I Where the cause is intrinsic and resident in the nail alone, it may usually be remedied by careful attention to the "toilet" of the nail, using a knife rather than a scissors, and cutting from behind forwards obliquely, so as to give the nail a pointed shape. By this means, the leaving behind of sharp portions at the margin which are insinuated into the flesh is rendered less likely. If the granulations are exuberant I

would recommend the application of a crystal or two of chromic acid, which leaves a hard, dry scab, under which the sore heals kindly. Careful trimming of the nail will usually ward off the complaint in future.

Where the cause lies in a superabundance of flesh in the toe, a condition which is usually accompanied with thin, tender skin, which perspires and chafes readily, I believe the best plan to be:

First, the application of chromic acid, if necessary, and thereafter pressure, either by strapping or by elastic. Every night the affected toe is to be surrounded tightly from the tip upwards by thin strips of adhesive plaster taken out of boiling water. This may be removed in the morning and replaced by an india-rubber cap, such as is worn over a sore finger during a *post mortem* examination. The toe is thus rendered and kept anæmic by compression; congestion is removed, and the tissues get more firm and resisting in the course of a few months.

In such cases I have sometimes noticed that the feet perspire freely, and then the wearing of fine worsted socks, the nightly use of a foot-bath, into which enough sulphuric acid has been poured to make the skin tingle, and sprinkling some powdered boracic acid over the foot every morning will expedite the cure.

3. When there is a combination of malformed nail and overgrowth of flesh, a judicious combination of the methods just described will probably effect a cure. Here, if anywhere, a scraping of the nail, making it thin and yielding, ought to do good; but I am doubtful of the utility of this procedure. The nail is too firmly bound down to the matrix to yield much to lateral pressure, and constant scraping, I think, has a tendency to develop an irritative hypertrophy of the nail itself. If all these or similar plans fail there is nothing for it but removal of the nail in the manner to be described presently.

II.—I. Of intrinsic cases by far the most important is flattening of the arch of the foot, and unless this cause is clearly recognized and successfully met, our treatment will almost certainly fail. To restore the arch of the foot, probably the most scientific treatment would be to make the patient recline on his back for some weeks, and permit the stretched plantar ligaments to regain their tone. In actual practice it will be found a very efficient plan to wear a small pad of several thicknesses of chamois leather or flannel under the ball of the great toe. This pad may be put on every morning and retained in position by a collar of thread or elastic carried round the root of the great toe. The toe, thus elevated beyond the reach of harm and relieved from its illegitimate labor, soon regains its normal condition. After a few months the pad may be gradually given up, and, with care, the condition need not recur.

2. When the cause is eversion of the great toe,

from whatever cause arising, the treatment is by no means easy. What I have found most satisfactory is a pad between the great and second toes, stopping short of the sore part. The pad may be constructed of several layers of flannel or chamois, and is kept in position by two collars round the root of the great and second toes respectively.

3. I have seen only three cases of the second and third toes overlapping the first, and causing in growing of its nail. In these the condition was easily remedied by wearing a double band of tape, so arranged as to keep the two offending toes turned outwards and pushed downwards. The tape was fixed in a loop round the fourth toe, passing double over the second and third toes, and then surrounded the great toe. The little apparatus is easily made by the patient.

So much for the scientific treatment of the complaint. But there is a class of cases, chiefly among hospital patients, in which imperfect intelligence and want of cleanliness nullify our efforts. Such patients have usually flat-foot, but they want to get well at once and permanently, and the endless worry of the morning pad is beyond their endurance. For all these, I remove the matrix as well as the nail, and scrape the periosteum off the bone. The operation is certain to cure permanently every case of the disease; it is a simple one, and by the exercise of a little dexterity, may be done on both feet while the patient is under the influence of nitrous oxide gas. The knife grazing the bone is carried rapidly round the flesh on the right side of the nail, and by a change of the same movement, passes under the nail down to the bone, and lifts away nail, matrix, and suppurating flesh. A piece of boracic lint is wrapped tightly round the toe, and need not be removed for a week. In the meantime the patient may get about. At the end of a week the sore will be smaller than the nail removed, for the healthy tissues have been pressed inwards over the sore. In three weeks the wound is cicatrized over, and most likely in a few weeks more a stunted nail is developed like that usually seen on the fifth toe, from which no trouble ever arises.

If the patient is not anxious to have a hand some nail on his toe, I never hesitate to let him have this mode of cure. The loss of a toe-nail, at its best, can never be a great one; and when it is ingrowing its loss is a gain.

I confidently recommend the procedure as far preferable to mere avulsion of the toe-nail, a plan of treatment which, in my opinion, ought to be abolished from surgery.—J. GREIG Smith, *British Medico-Chirurgical Journal*.

NOTES ON ASTHMA.

BY ROBERT SAUNDBY, M.D.

It is to be regretted that the term Asthma is not always restricted to that form of paroxysmal

dyspnoea, which, not being associated with any organic changes in the thoracic organs, has been rightly ascribed to nervous influences. It is to this form of asthma alone that I intend to allude. Its prominent clinical features have been graphically portrayed by Trousseau; "an individual in perfect health goes to bed feeling as well as usual, and drops off quietly to sleep, but after an hour or two he is suddenly awakened by a most distressing attack of dyspnoea. He feels as though his chest were constricted and compressed, and has a sense of considerable distress; he breathes with difficulty, and his inspiration is accompanied by a laryngo-tracheal whistling sound. The dyspnoea and sense of anxiety increasing, he sits up, rests on his hands, with his arms put back, while his face is turgid, occasionally livid, red, or bluish, his eyes prominent, and his skin bedewed with perspiration. He is soon obliged to jump off his bed, and if the room in which he sleeps be not very lofty, he hastens to throw open his window in search of air. Fresh air, playing freely about him, relieves him. Yet the fit lasts one or two hours or more, and then terminates. The face recovers its natural complexion and ceases to be turgid. The urine was at first clear and passed rather frequently, now diminishes in quantity, becomes redder, and sometimes deposits a sediment. At last the patient lies down and again falls off to sleep." But these attacks are not always so transient: there are frequently some prodromata, such as a feeling of tightness at the chest for some time previous to an attack, and still more frequently there is difficulty of breathing on the following day with perhaps cough and mucous expectoration. This consecutive bronchial catarrh tends to increase, and the subjects of it often acquire a definite degree of bronchitis which may continue, especially in the winter, and is liable to be aggravated from time to time by fresh paroxysms; the following is a case in point: H. H., æt. 40, at first suffered from asthma only during the months of July and August but during the last few years he has been liable to attacks all the year round. He has recently suffered from a good deal of bronchitis in the winter. (see p. 185 *Med. Abs.*, 1884).

Such cases present the appearance of ordinary chronic bronchitis, and unless the history is inquired into the asthma would be considered to be the result of this. Such a mistake would be very unfortunate, as by overlooking the nervous element in the case, we run the risk of omitting that part of the treatment most likely to be effectual in relieving the patient's sufferings. But in typical cases the attacks present all the characteristics of a neurosis. They occur in a person in otherwise good health, and pass off in a few hours without leaving anything but the recollection of the disturbance behind. During the paroxysm, physical examination fails to detect any sufficient cause for the dyspnoea in the lungs themselves into which air enters freely. The true hindrance to the respiratory act is in the impossibility of expiration. The

muscles of inspiration, especially the diaphragm are spasmodically contracted, and it appears to be now satisfactorily decided that this phenomenon is the true cause of the asthmatic paroxysm. We owe this discovery to Riegel of Cologne, the author of the article on Bronchial Asthma in Ziemssen's Cyclopaedia. In a recent communication he has shown that the occurrence of the paroxysm depends entirely on the influence of the phrenic nerves, which supply the diaphragm. While he confirms the statements of Williams, Paul Bert, and others, who induced convulsive dyspnoea in dogs by stimulating the vagus, he shows that when both vagi are divided the paroxysms may be produced by stimulating their centrifugal ends, while if the phrenics are divided the occurrence of the paroxysms is entirely prevented.

This serves to finally sweep away the old and always unsatisfactory theory that the dyspnoea was caused by contraction of the circular muscular fibres of the bronchi; a theory which never sufficed to explain the clinical phenomena, or corresponded with known pathological data.

The mechanism of the paroxysm being clearly established we are quite able to see how any irritant acting upon the surface of the respiratory mucous membrane may determine an attack, but it is still impossible to define the peculiar forms of irritation that can produce this disorder, still less to detect the constitutional predisposition which renders persons liable to it. For it must be at once admitted that all people who inhale hay pollen do not get hay asthma, nor do ipecacuanha powder or ordinary dust cause such attacks in persons generally, as in some specially susceptible individuals. Among the more remarkable and less common causes is the odor of flowers. Trousseau himself being susceptible to the smell of violets; and the odor of animals, especially cats! The constitutional predisposition was connected by Trousseau with gout, yet in only one of many cases of which I have notes, is there any history of this disease. Undoubtedly the predisposition is transmitted by descent, but owing to the loose way in which the word "asthma" is used we cannot attach much importance to statements to this effect made by patients. For my part, I am inclined to regard asthma as one of the rarer and major manifestations of the neurotic temperament; and I believe that it is a disorder which is yearly increasing in frequency.

Recently, I saw a young woman complaining of a persistent cold in the head, violent coryza, sneezing, and slight cough. She had asthmatic paroxysms at night, though from the slight degree of prominence given them by her in her complaints to me, we may infer that they were not very severe. Her father had suffered from "hay fever" and gout, while a paternal aunt was subject to true asthma. The exciting cause in this case appeared to be the dust from furs amongst which she was employed.

This association of coryza with asthma is most commonly seen in hay fever. The most common manifestation resembles a severe cold in the head, and the asthmatic paroxysm occurs less commonly. Doubtless both cases owe their origin to the same cause, the action of some irritant upon specially sensitive mucous surfaces. Trousseau supposed this form of coryza to be a minor manifestation of the asthmatic tendency, a sort of *petit mal* in the subjects of which you might anticipate, sooner or later, the occurrence of the major attack. Dr. Morell Mackenzie has recently drawn attention to a form of coryza very frequent in America, and which he attributes to the fine white impalpable dust which he says is so constantly present and so little regarded, in the atmosphere of a great part of the United States. Hay fever, also, is so common in the same country that there exists an American Hay Fever Association, made up of sufferers from this complaint, which meets annually to compare therapeutic observations!

I have met with several instances of this liability to severe coryza, apart from the effects of external cold, and the subjects were in every case neurotic dyspeptic persons. Now this type is, we are told, most widely spread throughout the United States, so that indeed neurasthenia is called the American disease. I am therefore inclined to believe that the liability to this form of coryza is one of the expressions of neurasthenia, and that given the presence of this condition, the exciting causes are numerous and almost omnipresent; doubtless the dust referred to by Dr. Morell Mackenzie being one.

As neurasthenia is undoubtedly on the increase in this country these considerations are not unimportant. I fear, from what I see in practice, that it is a disease not generally recognised, and with which there is too little sympathy. It is not sufficiently known that the most eminent persons are the most prone to this condition; that we find it specially amongst our intellectual classes, our statesmen, authors, teachers and the like. Such men have usually done far more than their share of work of all kinds, and have been the very life of the organisations with which they have been connected.

One of my most recent examples was a vice-president of his ward committee, many years its secretary, and foreman in his factory: a man who, left early an orphan, had worked his way up to the highest rank in his own class. Surely such men deserve something better from the profession than to be relegated to the class of incurable chronic dyspepsias, and drugged alternately with brom. pot. and rhubarb and soda, as brain or stomach respectively show signs of distress. Given such a case, every rational practitioner will see his way to devising a mode of life by which the sufferer may bring his work, diet, and exercise within the limits of a nervous system, weakened by excessive and constant use.

Climate, season, and locality play an important

though obscure part in determining the incidence of asthmatic attacks. The hay-pollen theory explains the cases which are better in the town than in the country, and in the winter than in summer; but it does not explain the cases in which the reverse of this is true, or such examples as that of the twin brothers mentioned by Trousseau, who, being natives of Marseilles, could not live there on account of their asthma, yet got rid of it easily by crossing to Toulon, and never suffered from it in Paris. I know a lad who spends part of his time every year at four different houses; at two of these, in London and Wales, he is liable to attacks, while at the other two he is always free. Low-lying localities seem generally unfavorable to asthmatics, but nothing is more capricious than this disorder, exactly opposite conditions apparently suiting different cases; the city suits one, the country another; winter brings relief to this sufferer, summer to that one; fog and smoke confine one man to his bedroom, while to another they are indifferent, and to a third smoke may be positively beneficial.

The *intervals* during which the sufferer enjoys immunity vary very much. In some the paroxysms occur every night, in others at intervals of a few weeks, sometimes months may intervene. One of my patients went for two years free from an attack, without being able to assign any cause for the respite. These peculiarities are strictly parallel to the capriciousness in other respects already alluded to; and, like them, cannot receive at present any satisfactory explanation.

Is there any drug that wards off the attacks Belladonna, arsenic, lobelia, and *iodide potassium*, have each found supporters. I have given a sufficient trial to all of these, and the only one in which I have any confidence is iod. pot. Its value in this disorder has been long known, but it is not so generally appreciated as it should be. The dose required is large, ten grains three times a day, or the same amount in two doses of 15 grains each. Another drug, which certainly appears to be of use, is *sulphur*, the *balsam pectoris* of the celebrated Hoffmann. This may be given in doses of 10 or 20 grains in syrup or honey, once or twice daily.

The importance of counter-irritation is well insisted upon by Dr. Graves, he recommended the application of the *linimentum terebinthinæ aceticum* to the nape of the neck and the upper part of the chest and back. Some years ago I was struck by the results recorded by Dr. Faukner, from the use of pigmentum iodi painted over the course of the pneumo-gastric nerves. In several cases I have seen this plan of essential service, and can recommend it though it has not proved in my hands a radical means of cure. The man H. H. who was suffering very much from dyspnoea used the iodine paint and reported that he had slept all night for the first time in 12 months.

As to the *modus operandi* of this procedure we may conceive that vigorous stimulation in the cervical region would be very likely to have some

effect upon the phrenic nerve; and if we accept the most recent views, that the spasm is mainly due to contraction of the diaphragm under the influence of this nerve, counter-irritation, not necessarily "in the course of the pneumogastric," but in that region, or in the nape of the neck, as Graves suggested, seems a very rational, and proves a very satisfactory method of treating this disorder.

When there is persistent *dyspnœa*, some *bronchitis* and *cough*, a cough mixture must be given, and to the ordinary mixture of squill, senega, and ipecacuanha, I would recommend the addition of 15 drops of the fluid extract of *Grindelia Robusta* (a species of sunflower). This is one of the new American remedies which has fairly stood the test of experience, and has proved a valuable means of relieving *dyspnœa*.

The value of inhalations of stramonium, nitre, tobacco, etc., has been perfectly well established, and these sufferers are in the habit of seeking such remedies without consulting us. Various articles, cigarettes and pastilles, are commonly advertised. Dr. Sawyer, some little time ago, asked Messrs. Southall to analyze one of the most popular forms of these latter, and they reported it to contain approximately one part each of powdered aniseed and potassium nitrate, and two parts of powdered stramonium leaves. The hypodermic injection of morphia is strongly recommended by Dr. Steavenson, himself a sufferer from asthma, as the most effectual means of relief during the paroxysm. One of my patients who was no doubt dyspeptic, found a great deal of relief from the occasional use of an emetic, while another of his plans for treating himself was to abstain from food entirely for 24 hours.

Constipation may be present, and we may take it as a rule that torpor of the bowels always acts prejudicially on the respiratory tract. I do not think in the present day quite sufficient attention is paid to the value of purgatives in the treatment of disease. It often happens that otherwise well considered treatment fails for want of an associated purge, and in a great many conditions, as in chlorosis, purgation is an absolute essential to the success of the specific remedy employed. Moreover, we leave this matter too much in the hands of our patients and think any laxative will do. This is another very serious mistake; any laxative will not do. Each condition has its appropriate laxative, and in the one we are at present considering sulphur, otherwise indicated, is the best.—*Birm. Med. Rev.*

TREATMENT OF RINGWORM.

Alder Smith (*Brit. Med. Jour.*, Nov. 1884) recommends the use of chrysophanic acid dissolved in chloroform, in the proportion of seven grains to the ounce. He says that it is the most

efficient treatment that he has yet tried.—*Jour. Cut. and Ven. Dis.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITORS:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. LOND
Editor and Proprietor.

R. A. KENNEDY, M.A., M.D., Managing Editor.

ASSISTANT EDITORS:

JAMES C. CAMERON, M.D., M.R.C.P.I.

CASEY A. WOOD, C.M., M.D.

GEORGE E. ARMSTRONG, C.M., M.D.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, JUNE, 1885.

SMALL-POX.

For some years past Montreal has been free of small-pox. This fortunate state of freedom from a disease so terrifying might have continued for years to come but for the supineness of our authorities and their refusal to take the first case into the civic hospital. What has been the result. Misery or death to many, hundreds terrified lest they should contract it, and probably thousands prevented from visiting the city on account of the notoriety given to its existence. Judging from the medical officers' reports its spread is gradually increasing, and there is apparently no sign that we shall be free from this scourge for some time to come. The Board of Health confesses itself helpless to prevent its further spread, declares the present *abominable* hospital full, and unable to accommodate any more patients, and obliges the retention in private houses of many cases which would otherwise be quite willing to submit to isolation. So, because the Board does not see its way to expend a few hundred dollars in erecting a cheap shelter on the Hospital ground, dangerous centres must be permitted to remain. At this time of the year, and for a couple of months to come, tents might be erected, with a double cover to keep off the rain, each to contain two beds. The cost would be trifling, but the gain to the patients immense. There would be the best of ventilation, a pure atmosphere, and the period of convalescence

shortened. We recommended this plan to the Board, and thus may, they, do to others what we would prefer doing for ourselves if thus afflicted. We have already suggested in a previous issue that now is the time for our Board of Health to consider the matter in its proper bearing, and have erected pavilions suitable to meet all future contingencies. Surely the money can be afforded unless it is that our aldermen are deficient in patriotism, or that there are no printing contracts to dispose of, in looking after the city's health. All cases of small-pox, no matter who the patient may be, should be completely isolated, and this can only be done by removing them from private houses and contact with persons whose business demands their mixing with the public generally. Seriously, we cannot conscientiously advise any one to go to the present Hospital—we would not go, that is certain, and why? The answer is plain on reflection to any one who will visit its wards. Patients in all the various degrees of malignity are crowded into rooms, each having a much smaller cubic space than is necessary for persons in good health, and each is obliged to breathe the poisonous emanations of others. What, therefore, can be the chances of recovery or thorough convalescence. The Chairman of the Board of Health enjoys the confidence of the Medical Profession, is conversant with the requirements needed, and is thoroughly competent to deal with the matter, so that it might be expected that full authority would be given him to stamp the disease out. We fear, however, that he finds his position no bed of roses, and that too many obstacles are in his way to effect his purpose. There is another aspect to the question. A reasonable man might consider it quite sufficient to have all cases reported to the Board, whose duty it is to placard the house and take every precaution necessary to prevent its spread, and that the health officers' reports would be quite sufficient for the daily newspapers. Reporters, however, do not seem to be very reasonable in their selection of items, for where is the sense in the publicity that has been given to this outbreak? Indeed, if we take as a symptom the morbid matter that is constantly filling the columns of the daily press and feeding the public mind, the indication would appear that the average reader is to a great extent mentally degraded, and that the press, instead of being an educational factor, is merely carrying out the demand for sensational items. We would therefore urge upon the Board the necessity for remodeling this so-called Hospital,

and to place it on such a plane that men of all conditions in life may enter its doors with confidence, and ensure safety to their families and the public generally.

SPAYING FOR UTERINE FIBROIDS.

This operation, which was first performed by Dr. Trenholme of this city, has been occupying the attention of the German Gynæcological Society, when Dr. WIEDOW (Freiburg) presented a paper upon the subject. He gave a synopsis of 63 cases which had come under his notice, among which there were twelve deaths.

Prof. Hegar had operated 21 times, with three deaths. One of these fatal cases did well for six months, when renewed bleeding and enlargement of the tumor destroyed life. The remaining 17 cases did well, being followed by cessation of the catamenia. Freud (Strassburg) reported six cases; in all favorable results were obtained, except one, where no benefit ensued. In this case the tumor was of immense size, as in one of the fatal cases operated upon by Hegar. Hegar stated that on the average he regarded the operation as less dangerous than removal of the growth, but sometimes the danger was greater; when he found a good pedicle he preferred ablation when the tumor was large. In small tumors oöphorectomy is, in his opinion, a very effectual operation. Kaltenbach (Gissen) also reported two successful operations, but at the same time stated that the menses had continued in several cases after the removal of the ovaries. HEGAR stated that cystic degeneration of large fibromas occurs even after normal cessation of menses, and the same occurs in cases after the climateric is brought about by the removal of the ovaries. For this reason he regards the prognosis in very large fibromas as doubtful.

This discussion is of great value, as affording data for the selection of cases suitable for oöphorectomy—where the tumor is very large not only is the operation dangerous and difficult, but the after-results are so uncertain that spaying would seldom be a warrantable procedure. In such, not only may cystic degeneration take place, but menstruation may continue and so nullify the result of the operation. In one case of spaying operated upon by Dr. Trenholme the menses have been quite regular and in every respect normal. This has been the case for more than six months. The future of this, one of the grandest of modern operations, would seem, as a rule, to be

limited to these cases where the fibroid is small or of moderate dimensions, and where the climateric is too far off to enable the patient to reach and safely pass that period.

THE MEDICAL SERVICE.

The following table and other information bearing on the sick and wounded volunteers in the North-West has been compiled from reports in the office of the Surgeon-General at Ottawa, and, though somewhat roughly summarized, will serve to show the amount of work entailed upon the surgical staff and the excellent results so far obtained. We are indebted to the courtesy of the Surgeon-General in allowing us the privilege of seeing the reports, and also for much information so cheerfully given at all times.

The following table shows the condition of the occupants of beds at the hospital at Saskatoon on the 30th May under the charge of Dr. James Bell:

Face—

Comp. fracture of lower jaw.....convalescent.
Wound of eye and temple. " lost eye.

Chest—

Wound of right lung....improving.

Abdomen—

Wound of left groin.....bullet still in pelvis, doing well.
Wound of right side.....convalescent.
Contused wound....."

Back—

Wound of left back....."
Wound of back and left chest.....empyema, doing well.
Wound of left back.....doing well.

Scrotum and perineum—

Wound of testicle.....doing well.
Wound of thigh, scrotum and testicle (Half-breed).convalescent, but loss of both testicles.

Upper arm—

Wound of right arm.....convalescent.
Wound of left arm....."
Wound of left shoulder...severe, doing well (since been discharged).
Amputation of left arm...convalescent.
Wound of left shoulder...severe, doing well.

Forearm—

Wound of left forearm...doing well.
Wound of right elbow...improving slowly.
Wound of right wrist...convalescent (since been discharged).
Wound of right forearm...convalescent.

Hand—

Wound of left hand.....severe—probably lose hand.

Thigh—

Wound of right thigh....convalescent.
Wound of left thigh.....doing well.
Wound of right thigh...."
" "not doing well, suppurating, but not in danger.
Wound of left thigh.....doing well.
" ""
Comp. frac. of right thigh
(Half-breed).....thigh amputated—very low.

Leg—

Comp. fracture of left tibia.doing well, will probably save leg.
Wound of right leg.....convalescent.
" ""

Foot—

Wound of sole of foot...."

Large joints—

Wound of right elbow....doing well, damaged elbow (since discharged).
Wounds of right knee and left leg.....wound of knee serious to limb (since dead).

Miscellaneous—

Pneumonia.....convalescent.
Acute rheumatism....."
" ""
Flesh wound, left side...."

Besides the above casualties now under treatment at Saskatoon there have been many others, disposed of as follows:—Face, 1; abdomen, 1; back, 1; upper arm, 7; forearm, 6; hand, 4; thigh, 4; large joints, 1; rheumatism, 3; sciatica, 1; scald, 1—total 30, discharged to base hospital at Moosejaw, May 20th. Face, 1; chest, 1; abdomen, 1; forearm, 1; hand, 1; thigh, 1; rheumatism, 1—total, 7, discharged home. Upper arm, 2; forearm, 1; leg, 1; rheumatism, 2, discharged for duty. Neck, 1; chest, 1; thigh, 1—total 3, died.

At the battle of Cut Knife Hill, fought May 2, 1885, the casualties were:—

Killed, 8—Six being shot through the head, of whom five died in action and the other at Battleford the following day. Two were shot in the body, one dying in action shot through the chest, and the other at Battleford on the following day.

Wounded 14—One through nose and cheek, severely, requiring removal of cheek bone two weeks subsequently. Two in the neck, both severe, one in back of neck, and in the other the bullet lodged against the spine below the level of spine of scapula, and was extracted May 20th. Two of upper arm, one of a severe flesh wound,

the other a comminuted fracture of neck of humerus, severe, and necessitating removal of a portion of the humerus May 7th. One severe flesh wound of left forearm; one shot in the back, the bullet being removed on the field; one in the right buttock, severe; one in the left side, severe; one in abdomen, bullet not found, severe; three of the thigh, two being superficial and slight, and the other severe; one superficial wound of left calf slight.

The medical staff present on the occasion consisted of Brigade Surgeon Strange of the I. S. Corps and Surgeon Lesslie of the Q. O. R., also an ambulance corps of one Sergeant and eight men of the Q. O. R., with two stretchers.

Of the twenty-six supplemental commissions offered by the British War Office to graduates of the Royal Military College at Kingston, we understand that six will be in the Royal Artillery, ten in the Engineers, and the remainder in Infantry and Cavalry Regiments.

CRANIOTOMY.

The Society of the Holy Inquisition has lately decided, in answer to a question submitted by the Archbishop of Lyons, "That craniotomy does not receive the sanction of the Church, and that in childbirth where one life must be sacrificed the life of the child must be saved, if possible, even at the expense of that of the mother." This has always been the position taken by the clergy of the Roman Catholic Church, but it is so contrary to all human ideas that but few Catholic parents would submit to such a sacrifice. We doubt very much if any intelligent physician would suggest such a course, or assume the responsibility of its performance. Medical teaching and modern public opinion are alike opposed to such mediæval doctrines.

We have received the Forty-second Annual Report of the Montreal Dispensary for the year ending April 30th, 1885. This institution is dependent chiefly upon voluntary contributions for support, but each applicant for relief is expected to give five cents. This plan was adopted by the Board to prevent undue attendance of patients, and as a means of obtaining some return for the benefits bestowed. This plan has worked very well indeed, and might be followed with advantage by other

charities, as many of the applicants to such can well afford to pay something. 10,359 applications were attended to during the past year, the average cost of each patient being eleven cents.

THE LATE ALFRED JACKSON, ESQ., M.D., QUEBEC.

We regret to have to record the death of Dr. Jackson, who breathed his last on the 15th July at noon. Deceased was one of the oldest medical men in the city of Quebec. He was professor of midwifery and diseases of women and children in Laval University. He was well-known for the thoroughness of his attainments in medical science, and especially in the particular branches to which his attention was most necessarily directed; and in surgery his standing for more than a quarter of a century has been in the front rank in this part of the Province. Dr. Jackson was born in 1810 at St. Andrew's near Montreal, his father having been Artemus Jackson from Newton, Mass., and for many years a lumber merchant in the city of Quebec, dying about 1847. The family were Loyalists at the time of the war of the American colonies with the Mother Country. Deceased was educated in the city of Three Rivers, Province of Quebec, and in medicine at the University of Edinburgh, being licensed by the Royal College of Surgeons of that city in 1832-33, and returning to Canada the next year. He was one of the originators of the Medical School in Quebec, established several years before Laval University, in which institution he took his present chair, when the medical department was first opened. He was a member of the council of that university, and has been so since it was originated. He was elected member of the Literary and Historical Society of Quebec in 1837. Professor Jackson was for 22 years visiting physician to the Marine and Emigrant Hospital, Quebec, and at the time of his death held a similar connection with the Hotel Dieu Hospital. He was also Government visiting physician to the Beauport Lunatic Asylum. The Doctor was assistant surgeon to the volunteer forces in 1837-38, being in active duty nearly two years. During that exciting political period a great many troops were stationed at Quebec. In 1854 he was named the Government Joint-Commissioner to enquire into the causes leading to the introduction of cholera into Canada during that year, and drew up a long and elaborate report.

The Professor was for twenty-one years one of the Governors of the College of Physicians and Surgeons in this Province, throughout which he is well-known to the medical fraternity. In every respect his character stands high, and he had a great many warm friends. The deceased was married three times, his last wife surviving him.

PERSONAL.

Lt.-Col. D. Bergin, M.P. for Stormont and Cornwall, and Surgeon-General of the Militia, who represents the St. Lawrence and Eastern Division in the Medical Council of Ontario, has been unanimously elected President of that body for the current academic year. This is the second time he has received the distinguished honor at the hands of his colleagues, the last time he occupied the chair being in 1881-82.

Dr. G. T. Orton, M.P., Surgeon of the 90th Battalion, who was Brigade Surgeon with the troops at Batoche, has recently returned to Ottawa, to devote himself to more peaceful duties in the Legislature. His return to the Commons was the signal for an outburst of applause from those present, and the veteran Premier, who was addressing the House at the time on the Mounted Police Augmentation Bill, took the opportunity afforded him by the interruption to welcome his supporter with a neat compliment.

Dr. Corbett, of Ottawa, died recently in Winnipeg. He was attached to the Ambulance Corps of the North-West field force.

Dr. Campbell, Senior Editor of the RECORD, sailed for Europe by the Allan SS. Parisian on the 25th July. He will be absent two months.

Dr. Gaherty has resigned the chair of Anatomy in Bishop's College.

Dr. Gardner has been appointed Professor of Anatomy in Bishop's College.

Dr. Thomas J. Alloway has been appointed Gynæcologist to the Montreal Dispensary.

Dr. J. B. McConnell has been appointed Lecturer on Histology in Bishop's College.

CORRESPONDENCE.

Editor CANADIAN MEDICAL RECORD.

SIR,—The Thirty-Sixth Annual Session of the American Medical Association met at New Orleans on the 28th of April, at the Thulane Hall.

The meeting was called to order by Dr. Samuel

Logan, of New Orleans. There were on the platform: Drs. N. S. Davis, nestor of A. M. A., Dr. T. G. Richardson, dean of the Medical Faculty of Louisiana, and others.

The president, Dr. Henry F. Campbell of Augusta, Georgia, then proceeded to deliver his address.

Dr. Brodie moved that a vote of thanks be tendered to Dr. Campbell for his able address, which was unanimously adopted.

Dr. Billings, U. S. A., presented his report on the arrangements for the meeting of the International Medical Congress at Washington, D.C., in 1887. Dr. Shoemaker, of Philadelphia, attacked the action of Dr. Billing's committee, of which he also was a member; he claims that the committee had exceeded its authority, had assumed powers not granted, and that certain members had ignored others, and had bargained with "new code men," and given them representation.

Dr. Billings denied emphatically that there had been any bargain or understanding with "new code men," the latter had nothing to do with the committee, which went to Copenhagen to confer with the International Medical Congress. Dr. Billings recited the history of the organization of the committee of arrangements and defended them from the charges which had been made; he spoke very highly of Dr. R. P. Howard, as one of the vice presidents; in his position, being a Canadian physician, could not be a better one and being well known to the leading professional men of Europe, United States and Canada.

Dr. Daniel, of Texas, offered a series of resolutions providing for raising a new committee to arrange for the Congress. Dr. Saunders of Tennessee moved to approve the action of the committee, as far as it goes, provided they exclude all new code men. Dr. Saunders' resolution was lost. Dr. Kelley's substitute for Dr. Daniel's resolutions was adopted: yeas 131, nays 92. The resolution, as amended, provides for raising a committee, to be composed of members elected from each state, territory and district, representing the army, navy and marine hospital service, which committee shall meet the original committee on the International Congress, and have power to review, alter or amend their action, as they may deem best.

On the third day of its Session, on the section of medicine, cholera and its treatment, by J. H.

Hollister, Chicago, the discussion on this disease was opened by Dr. Austin Flint, of New York, and the subject was discussed by other members, and myself, as a member, participated in the deliberation of the debate, when I arrived at the hall, just after the discussion, which was about to be suspended to make room for special order of the day, consequently the president allowed me half an hour to discuss my views on the cholera, in regard of the presumptuous *bacillus* theory, by certain hypotheses of the day, and gave the proper treatment to control the discharges or the flowing of the white viscid secretion from the bowels in that disease.

Yours, etc.,

THIBODEAU, La. JOHN B. C. GAZZO, M.D.

REVIEWS.

The book recently written by Dr. D. W. Cathell, called "The Physician Himself," does not say a word about patients' diseases or their treatment, but does tell how to honorably get patients to treat, and also tells, in a plain business-like manner, what a physician must add to book-learning and college-wisdom in general, to make his success in life more certain, more rapid, and more complete besides telling what course professional tact and business sagacity dictate in almost every possible dilemma. The young and the old, the dull and the wise, will each find in it a feast of practical wisdom, worth many times the price of the book.

It is a large handsomely-bound octavo volume, pica type, green cloth cover, with polished red edges, about which the editor can give further information if desired.

Remit the price, \$1.25, either in money or stamps, to the publishers, Cushings & Bailey, 252 W. Baltimore Street, Baltimore, Md., or almost any bookseller in the United States, and you will receive a copy of the latest edition by return mail.

PAMPHLETS RECEIVED.

Harvard University Bulletin for May, 1885. Edited by Justin Winsor, Librarian of the University.

Endometritis Fungosa: Its Pathology and Treatment. By James B. Hunter, M.D. Reprinted from the *Medical Record*.

A Comparative Review of Quarantine and Maritime Sanitation. Excerpted from the New Orleans *Medical and Surgical Journal* for June, 1885.

The Failure of Legislation in Limiting the Spread of Venereal Diseases. By E. W. Allison, M.D., and W. E. Ashton, M.D. Read before the Philadelphia County Society, April 22, 1885.

El Boletín—Medico, Tongillo, Peru, South America.

Epidemic of Typhoid Fever, at Plymouth, Pennsylvania. By Dr. E. O. Shakespeare. Philadelphia County Medical Society.

Insanity and Divorce.—The Neuropathic Conditions and Treatment of Cancer.—Mysomania. By C. H. Hughes, St. Louis, Mo. From the *Alienist and Neurologist*.

Supplement Kansas Law Journal, May 2nd, 1885: Containing the Prohibitory Law, Pharmacy Law, Dentistry Law, and Board of Health Law.

Clinical Notes on Swallowing of the Tongue. By Geo. W. Major, B.A., M.D., Montreal.

Bacterial Pathology: A Series of Papers on the Exhibits at the Biological Laboratory of the Health Exhibition, under the charge of Watson Cheyne. Illustrated.

Specialties and their Relation to the Medical Profession. By L. Duncan Bulkley, A.M., M.D., New York.

Foreign Bodies left in the Abdomen after Laparotomy. By H. P. C. Wilson, A.M., M.D. Reprint Gynecological Transactions, 1884.

Surgical Notes from the Case Book of a General Practitioner. By W. C. Will, M.D., of Sandy Hook, Conn. Reprint *New England Medical Monthly*, Aug., 1885.

Constitutional Treatment of Caries and Necrosis. By H. C. Wyman, M.D., Detroit, Michigan.

History of the Clamp Suture of the late Dr. J. Marion Sims, and why it was abandoned by the Profession. By Nathan Bozeman, M.D., New York. Reprint from Gynecological Transactions, 1884.

Transactions Medical Society of the State of Tennessee, Fifty-second Annual Meeting, 1885.

COLLEGE ANNOUNCEMENTS RECEIVED.

Atlanta Medical College, Atlanta, Georgia, 1885; Dartmouth Medical College, Hanover, N. H., 1885; Medical Department University of Buffalo; Medical College, Charleston, South Carolina; Trinity Medical School, Toronto.