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CANADA

MEDICAL JOURNAL

ORIGINAL COMMUNICATIONS.

Tuberculization in various Countries and its influence on General Mortality. By W. CANNIFF, M.D., M.R.C.S., Eng. Corresponding Delegate to the International Medical Congress, &c.

[Read before the International Congress, held at Paris, August 1867]

To the Secretary-General, DR. JACCOUD.—

The following statements and remarks are respectfully submitted in connection with the subject of Tuberculosis, and the hope is entertained that they will not be found altogether irrelevant to this important question, which is to engage the attention of your distinguished body.

THE INHABITANTS OF CANADA DIVIDED INTO THREE CLASSES

The inhabitants of Canada at the present time are unequally composed of the Aborigines of America, the descendants of the first European colonizers, and those who are of foreign birth.

An examination of these three classes as to health and longevity under similar circumstances may not be invaluable, nor foreign to the subject of *Tuberculosis*.

THE ABORIGINES.

The Indians of Canada are to a great extent domesticated, and comprise remnants of almost all the once powerful tribes which held possession of the territory of the United States and of Canada. The advent of the aborigines upon the continent of America remains an undetermined question; the circumstances of their coming are buried in the ocean of prehistoric days. Indian archæology, so far as discoveries have been made, indicates a far remote period when America was first inhabited, and that successive tribes, probably from Asia, have come as a conquering people and swept away the occupants; not always exterminating them, but forcing them to some secluded quarter where, undis-

turbed, they gradually became again powerful, and then issuing forth drove back the conquerors. The aborigines now extant may be descendants of the more ancient, as well as 'the more recent tribes that peopled the new world.

The broad American continent, once the domain of the Indian, is now to a great extent possessed by the European. It is a fact well known that by the advancing tide of emigration the aboriginal inhabitants are carried away, and it has been inferred that physical degeneration of the race was the cause. This point may, however, be questioned. Indeed we are in possession of facts which seem to show that the Indians under favourable circumstances do not numerically decrease. They have succumbed to the European and to the power of colonization; yet the Indians of Canada have not since the close of the war of 1812, decreased in number. Formerly these nomadic tribes were wont to traverse extensive regions of the wilderness, but the presence of the European has pressed them into limited spots of *Reserve*; and it is not true that their number has decreased since the tomahawk and scalping-knife ceased to do their work of extermination. It has been a common belief that civilization is inimical to long life among the American Indians, but the writer has the testimony of Captain Anderson, who was for many years Superintendent of Indian affairs for Canada and who has spent the greater part of his long life among the Indians of the Hudson's Bay Territory, that mortality is far greater among those tribes that still lead a nomadic life than with those who have become domesticated*. In this connection it must be stated that the Indian has an intense desire for alcoholic drinks, and it is the concurrent testimony of many who have been associated with them that it is the indulgence of this passion that has led to such a great mortality.

There is no possible way of learning the rate of mortality among the wandering tribes, but respecting those domesticated in Canada, trustworthy testimony can be adduced.

In the year 1858, the Government of Canada appointed a commission to make certain enquiries concerning Indian affairs in the Province. This commission, in carrying out the object of its organization, submitted some forty questions to the superintendents of Indian affairs, and

In returning to Canada, the writer was fortunate in having for a fellow-passenger Bishop Taché of Red River Settlement, who has been there residing among the Indians 22 years. He says that speaking generally the *Indians* of the Hudson's Bay Territory are not decreasing, notwithstanding their wandering life. Their exposures frequently cause inflammation of the lungs; but there are few cases of consumption.

to the various missionaries among the tribes in Canada. Most of the missionaries had been living with the Indians for many years, some so long as ten, twenty, thirty, and even forty-four years. Among these questions were the following. "Is the health of the Indians under your superintendence generally good or otherwise, as contrasted with the health of the white population in the neighbourhood." "Do the tribes under your superintendence increase or decrease in number irrespective of migration." To these questions were received replies from twenty-five persons. Of these, *eleven* were to the effect that the health of the Indian was equal to that of the white, *four* uncertain, and *eight*, not so good. In *twelve* instances their number was on the *increase*, in *two* *stationary*, and in *eight* on the *decrease*.

Several of the missionaries remark that the principal disease among the Indians is consumption; but that this is due to exposure, and irregular dieting while upon their fishing and hunting expeditions; and also to their indulgence in strong drink. It is stated by a majority of those who reply that those tribes which have adopted a domestic life, and whose people partake of suitable food, are not particularly subject to consumptive diseases. It is also stated by many that the cause of the numerical decrease in a large number of the tribes, is due to the great mortality among the children, arising from their itinerant life.

From the facts and data at present available, and these are not unimportant, the conclusion is arrived at, that the aborigines of Canada—of America it may be said, whatever may be their ancestry, do not manifest a natural disposition to degenerate. With the same advantages of living as the whites, in similar circumstances as to comfort, they show no unusual proneness to tuberculosis, a disease which has received the credit of doing the work of gradual extinction.

THE EARLY COLONIZERS OF AMERICA.

More than two hundred years have passed away since Europeans became permanent occupiers of the New World. While Canada was taken possession of by the gallant and intrepid French under accomplished leaders, the bold and adventurous English were securing a footing in the present state of Virginia, and Commercial Holland was planting a colony in New York. Let us inquire respecting the descendants of these first colonizers of America, more particularly those resident in Canada.

THE FRENCH.

It is two hundred years since the effective settlement of Canada by the French took place, and it is now fully a hundred years since imigra-

tion from France has ceased. The French population did not then, according to *Garneau*, exceed 60,000. The number of inhabitants of French origin at the present time amounts to about 880,000. In addition to these present inhabitants of Canada, a large emigration, numbering several thousands of the French Canadians, has taken place to the United States.

Now, if the climate of Canada were inimical to Europeans, if, as has been asserted they will, under its influence, degenerate and decrease, and ultimately die out, when no longer sustained by immigration, it would naturally result that within the period of a century some indication of such degeneration would present itself. But, instead of such a calamity, the French of Canada have steadily increased in number; they do not exhibit in any respect marks of deterioration. Are the French at home brave, eloquent and wise, so are their kindred in Canada. Are the inhabitants of France long lived, the assertion is ventured, that those of French Canada are equally so. Upon this point Dr. Larue, Professor at Laval University, in reply to a question submitted by the writer through a gentleman connected with the Government at Ottawa, gives his opinion "that there are no medical statistics of a reliable nature by which the longevity of French Canadians can be established. If such did exist he is convinced by his own observation and the opinions of his colleagues that the most surprising figures could be produced in favor of the great average longevity of the Franco-Canadian race.

Dr. La Rue further states, that he has every reason to believe that consumption is of rare occurrence among the French race.

THE ANGLO SAXON.

Western Canada was first settled in 1784 by a band of Loyalists from the recently established United States. These refugees, who would not rebel against their King, numbered about 10,000, and were mainly descendants of the first colonizers of New England and the Dutch of New Holland, now New York.

These first settlers of Upper Canada have to a marked extent remained a distinct people. Although emigrants have continually entered the Province, intermarriage between these and the former has, until very recently, been quite the exception.

From extensive personal knowledge*, derived from observation and collected facts, the writer is prepared to say, that among the descendants

*During the last few years the writer has been collecting facts relative to the first settlement of the Bay of Quinté, one of the oldest sections of Upper Canada, and he is able to speak very decidedly respecting the great age to which many attain.

of the first settlers of Western Canada longevity is remarkably great, a large number reaching, not alone seventy years of age, but eighty and ninety, and even a hundred, while in physical development they are by no means deficient.

Tuberculosis is one of the prevailing diseases and causes of death among them, but it may be safely said that it is no more frequent, at least, than among the inhabitants of European nativity.

In view of the foregoing facts and statements, can the belief be entertained that the European transplanted to the shores of America must necessarily degenerate, and, in time, become extinct? If, in some parts of America, the spectacle is presented of the older families being decimated and of ceasing to exist, must we not search for other causes than those of a climatic nature?

EUROPEANS.

The remaining class, yet to be noticed, consists of those of European birth. It is a matter of regret that accurate data cannot be supplied upon which to base definite remarks respecting the health and longevity of immigrant settlers in Canada; in the absence of these, there can be no hesitation in offering statements based on personal observation, and the writer would humbly intimate that he has given no little attention to this subject.

The climate of Canada and the circumstances of Canadian life are found by the immigrant at first to be very severe. After a few years, however, he becomes acclimated, yet it may be said does not attain to so great an age as those born in Canada.

It does not appear that individuals predisposed to tuberculous diseases are likely to suffer by coming to live in Canada. On the contrary, many with the symptoms of incipient Tuberculosis are permanently benefited by the change.

Ontario, Dominion of Canada, July, 1867.

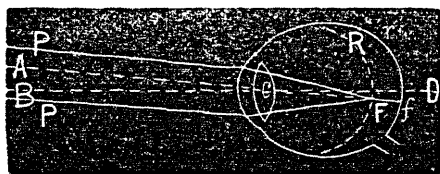
Lectures on the Diseases of the Eye, recently delivered before the Ophthalmic Class of the Toronto School of Medicine, and the Ophthalmic Class of the Medical Department of the University of Victoria College. By A. M. ROSEBRUGH, M.D.

LECTURE IV.

Diverging Strabismus.

According to Prof. Donders, Diverging Strabismus depends, as a general rule, upon Myopia. The nature of the relation between Diverging Strabismus and Myopia is, however, not altogether the same as that

between Convergent Strabismus and Hypermetropia. Convergent Strabismus arises from Hypermetropia, on account of the great efforts of accommodation which the optical defect renders necessary. When Diverging Strabismus arises from Myopia, however, the excessive refraction of the eye is not without its direct influence, but the chief cause of the deviation depends on the distension and change of form of the globe. It is now normally admitted that in the great majority of cases of Myopia, the cornea and crystalline lens have a normal degree of curvature, and that the defect depends altogether upon a lengthening of the antero-posterior diameter of the eye; the globe having a tendency to take the form of an ellipsoid instead of a sphere.



Thus, in Fig 3, let E represent a section of a myopic eye; R F will represent the position of the retina in the normal eye upon which parallel rays are brought to a focus. The distance between the F and S will represent the amount of abnormal lengthening of the antero-posterior diameter of the eye.

This lengthening of the antero-posterior diameter interfere with the mobility of the eye in a general way; but more especially on account of its filling up, more completely, the socket,—this latter being a cavity of somewhat the same shape. The ellipsoidal form of the eye in myopia affects its movements inwards as well as outwards. Out of seventeen cases of myopia examined by Donders, nine could not move their eyes through a range of more than about 50 degrees, whereas, the normal eye has usually a range of about 120 degrees. Diminished motion of the eyes outwards is little more than an inconvenience simply necessitating considerable turning of the head, but insufficiency of motion inwards is attended by more important consequences, which we will proceed to consider.

Most persons with normal vision are able to converge their eyes simultaneously upon an object that is brought as near as two inches from the root of the nose. In high degrees of myopia, however, the eyes cannot be converged to a near distance, for two reasons; in the first place, free motion of the eyes inwards is diminished by the ellipsoidal shape of the ball; but in the second place, in high degrees of myopia, there is displacement of the yellow spot of the retina *inwards*; in consequence of

this, in order to see an object binocularly, at a short distance, (for two-and-a-half inches from the root of the nose,) it will be necessary for the cornea of each eye to converge more than would be the case with normal eyes looking at an object at the same distance; from which it is evident that motion inwards is considerably confined. Thus, in Fig. 3 let E represent a horizontal section of a myopic eye. The line B a D will represent the axis of the cornea, and the line A a F the line or axis of vision. The axis of vision cuts the cornea *external* to centre. In order, therefore, that the image of A may fall upon the yellow spot, it is necessary for the eye to turn *inwards*, so that the axis of the cornea will be turned towards B. *

In addition, there exists in some cases a considerable degree of insufficiency of the internal recti muscles. This weakness in the internal recti muscles in the normal eye would simply give rise to what is called muscular asthenopia, but when myopia also exists, it leads to diverging strabismus.

Donders divides diverging strabismus into two divisions:—1st. Relative diverging strabismus. 2nd. Absolute diverging strabismus. The two eyes can be converged simultaneously upon a distant object, and see it binocularly; but when the eyes are directed to a near object, either one eye is used or both eyes may be converged for a short time upon the near object, when the muscles feeling fatigued (muscular asthenopia being developed) one eye diverges, (Student Knox's College.) As it is only when examining near objects that myopic persons see with perfect distinctness, it follows that if they have relative diverging strabismus, these near objects will be examined with one eye only;—the other eye, although not absolutely divergent, is not sufficiently convergent to see the object simultaneously with the other eye. In the normal eyes, this deviation of one eye would cause annoying double vision, but in the case of the myopic eye, distant objects are not seen with sufficient distinctness to give rise to any annoyance from this cause.

In *Absolute Divergent Strabismus* one eye is permanently divergent, and no attempt is made to see binocularly. Absolute Divergent Strabismus may arise from paralysis of the internal recti muscles, inflammation, contraction of the external rectus, and impairment of vision in one eye; but Donders has proven that at least in two-thirds of the cases the pa-

* The eyes of myopes are more nearly parallel than is the case with those whose eyes are normal, because in the myopic eye the axis or line of vision corresponds more nearly with the axis of the cornea. In some cases this gives the appearance of an apparent convergent strabismus.

tients are also myopic, and that in cases of Relative Divergent Strabismus myopia is found ninety per cent of the cases. Absolute Divergent Strabismus is usually developed from the Relative form; and occurs most frequently in adults; whereas Convergent Strabismus is chiefly to be found in children

Donders sums up the result of his investigations as follows:

“ 1. Hypermetropia determines accommodative Asthenopia, which is actively overcome by Convergent Strabismus.

“ 2. Myopia leads to Muscular Asthenopia, which is passively eluded by Divergent Strabismus.”

The pathology of the muscles of the eye permit us to review—

TREATMENT OF STRABISMUS.—If a case of Convergent Strabismus from Hypermetropia be seen in its incipient stage, the squint will disappear if the Hypermetropia be neutralized by the proper convex spectacles. If, however, the use of the glasses be discontinued, the Strabismus is apt to re-appear. Convergent Strabismus is sometimes accompanied by high degrees of Hypermetropia, and consequently requires strong convex spectacles to neutralize the optical defect. A number of cases have come under my observation, where children were obliged to wear spectacles almost as strong as cataract glasses, in order to correct their Hypermetropia.

In cases where the Strabismus has become permanent, the defect cannot be treated without an operation. If the patient or his friends object to an operation, or if from any cause the operation is deferred, insensibility of the retina of the faulty eye may be prevented by having a bandage placed for a few hours a week over the other eye, so as to call into activity the function of the retina of the faulty organ.

Before operating, the degree of deviation of the eyes should be accurately measured, so as to enable the operator to judge of the extent of the operation necessary for its relief. This can be done with sufficient accuracy in the following manner:—direct the patient to look at some distant point directly in front, then with pen and ink, mark upon the lower eyelid the point corresponding with the direction of the pupil; now cover the non-deviating eye and direct the patient to fix the faulty eye upon the distant point; the direction of the pupil is again to be marked upon the lower lid of the same eye. The distance in lines between these marks upon the lid, will give the degree of deviation; if the marks upon the lid are, for instance, three lines apart, the deviation would be said to be four lines.

In the old operation of Dieffenbach, as usually performed in a case of Convergent Strabismus, a vertical incision, about half an inch in length,

is made through the conjunctiva and subconjunctival tissue of the faulty eye about midway between the cornea and the caruncle; the muscle is then taken up by a hook and freely divided with a pair of scissors, *behind* the hook, and some distance behind the tendinous insertion of the muscle. In cases of extreme Convergence, it was even recommended to remove a portion of the muscle. After the division of the muscle the eye was allowed to take its chance, if the eyes were parallel, well, if not, the surgeon could do nothing farther either to increase or diminish the effect of the operation. From this mode of practice satisfactory results were attained in only a small proportion of the cases, and even in the most successful ones in which the faulty eye was brought to occupy a central position, there were other deformities consequent upon the operation, which detracted very much from the result. When the muscle is divided behind the tendon, it becomes attached so far back that the mobility of the eye is very much diminished; and in some cases the antagonist muscle draws the eye so far in the opposite direction that the *Convergent* squint is changed to a *Divergent* one. The caruncle usually shrunk behind the inner commissure of the lids; the semi-lunar fold of the conjunctiva becomes obliterated, giving the organ the appearance of an artificial eye; and in many cases the eye is too prominent after the operation. It was only yesterday that I assisted a medical friend to perform a secondary operation to relieve the deformity following Dieffenbach's operation. The mobility of the eye was considerably diminished and its movements irregular. The organ was more prominent than the opposite eye and was slightly divergent; the caruncle had retracted and the semi-lunar fold had disappeared.

In the modern operations for Strabismus the amount of the deviation is first of all accurately measured, and in all cases where the deviation is from two and a half to five lines, it is now the practice to divide the operation between the two eyes in preference to performing a sufficient operation upon one eye to bring the two parallel. By thus dividing the operation between the two eyes, a lesser operation will be performed upon each, and consequently the mobility of the eyes will be less interfered with. The operation is changed in other important respects. The conjunctival wound is now made much nearer the cornea than formerly, the muscle is taken up near its insertion, and instead of dividing it *behind* the hook, the muscle is *cut in front and as near its insertion as possible*, thus a *tenotomy*, and not a *myotomy*, is performed.‡

Another modification recently introduced renders the result of the operation perfectly under the control of the operator. If after a division of the tendons of both internal recti there should be one divergence, it.

can be corrected by bringing together with a silk suture the edges of the conjunctival wound. The greater the divergence the larger must be the portion of conjunctiva that is included in the stitch. The suture acts beneficially also by closing the wound, promotes healing by the first intention, and it assists in preventing shrinking of the semi-lunar fold and caruncle.

In all operations for Strabismus the immediate object is to change the position of the insertion of one of the muscles. In the regular operation for convergent Strabismus the tendon of the internal rectus is divided, it then is drawn backwards and becomes attached to the sclerotic a short distance behind its former attachment; the squint is treated then by setting back the insertion of the internal rectus. But the convergence could also be corrected by setting forward the insertion of the external rectus. This setting forward of the insertion of the muscle is sometimes the only operation that will relieve Strabismus. This operation has its application more frequently in cases of Divergent Strabismus. In diverging Strabismus there is very frequently insufficiency of the internal recti muscles; when this is the case the external recti of both eyes may be divided without relieving the divergence; in that case it is necessary to increase the efficiency of the internal recti muscles by dissecting up their tendinous insertions and securing their attachment further forward. This is the operation that I assisted in performing on the patient yesterday, to counteract the effect of a rather free setting back of the internal rectus two or three months previously.

After the Strabismus is relieved by an operation, the optical defect upon which it depends must also be relieved, or the squint may return; it is more especially necessary in cases of convergent Strabismus depending upon Hypermetropia. This is a matter that hitherto was altogether neglected, and consequently was a very frequent cause of failure.

The great point to be kept in view, however, in treating cases of Strabismus, is to restore binocular vision. The eyes may appear to be parallel, and the patient's friends may be well pleased with the result, but unless the binocular vision is restored, the surgeon cannot congratulate himself with having performed a perfect cure.

Chemical Selections. By E. S. BLACKWELL.

Notes on crystals deposited from the Brain, by S. W. Moore. (*Chemical News.*)—In the month of June this year (1867,) Mr. Stuart, curator of the Museum, St. Thomas's Hospital, called my attention to

the fact that he had noticed in some of the brain preparations a deposit of crystals, which appeared to him to present a very beautiful and unusual appearance; he thought, perhaps, that I might like to examine them chemically, which I have done, thinking the results may lead to facts which will ultimately throw some light on the now very imperfectly understood compounds of the brain.

On inspecting a jar containing the deposit, there was found a very thick layer of crystals at the bottom, which, upon further inspection, were seen to have the form of rhombic plates; over these, however, there was a layer of what might have been mistaken for mucous or brain matter, but on examination with the microscope they presented a very beautiful appearance, two or three distinct forms being apparent, viz.—*a.* small stars, formed of globular bodies (of which there are seven, six aggregated one round,) a little smaller than the male human blood corpuscle. *β.* resembling two pieces of tape, one in a semicircle, the other stretched across its diameter, the ends on both sides being twisted. *γ.* This form was one piece only, its ends being brought round upon one another, and twisted.

These strange forms suggested the idea that some albuminous principle might probably have united itself with a crystalline substance, and have caused these structures to become manifest in the attempt to crystallise; they gave, under the influence of polarized light, a distinct cross, and what seems to confirm the supposition of their being a colloid is that, upon testing, nitrogen was developed. They are saponified by KHO, and dissolved by hot absolute alcohol, and separate out on cooling in a granular form, and are of course insoluble in water. On presenting these various tests to the crystals which were so densely crowded at the bottom of the vessel, some very interesting data were collected, agreeing with the tests for no other hitherto mentioned brain compound.

In appearance the crystals were waxy, they were tasteless and insoluble in water; on ignition they burned away with a bright smoky flame, leaving no residue whatever. The tests for N. P. and S, were carefully applied, but with no result; the substance was precipitable from its ethereal solution by alcohol; its melting point was 103° C., and on combustion gave the following per centage:—Carbon 43.79, Hydrogen = 8.09 and Oxygen 48.12. From this an empirical formula may be calculated having the following constitution, $C_7 H_{16} O_6$ or $C_{12} H_{26} O_{10}$, the latter, perhaps, giving a calculated result nearer the found one, viz. Carbon 43.64, Hydrogen 7.88 and Oxygen 48.48.

From the results obtained above we may safely conclude that the substance is not cholesterine, its high percentage of oxygen, and its low

melting point, excluding it from that supposition. It is equally impossible that it should be cerebrie acid, because it is perfectly neutral and contains no nitrogen; the absence of phosphorus proves it cannot be oleophosphoric acid. On exposing to the air the spirits from which the crystals had been taken, a fresh crop formed; these, however, were only crystalline plates of cholesterine.

LONDON CORRESPONDENCE.

Last evening a brilliant assemblage met at the *Conversazione* given by the President and Fellows of the Royal College of Physicians in Pall Mall. This annual gathering is always looked for with considerable interest, as it is without exception the most *recherché* thing of the kind that takes place in the metropolis. And so it ought to be, for no other institution represents the aristocracy of learning, of mind, and intelligence, and of sterling wealth, such as is met with here. All the great names in the profession of medicine here assemble, philosophers every one, men of thought and of wisdom, who do an amount of good which scarcely can be realized. The recent festivities in honour of the Sultan of Turkey prevented the Prince of Wales being present, for he (as did his distinguished father, the late Prince Consort,) loves once in a while to grace the classic halls of Harvey with his presence. Many of the most learned physicians of the Provinces think it no trouble to travel to London to attend the *soirée*, and hence one sees faces annually that come from considerable distances. Amongst the strangers present we noticed Archdeacon Patton, of Cornwall, in Canada, who was taken for a Colonial Bishop. Of the great number of interesting objects exhibited, may be mentioned a rare series of old Wedgewood portraits; apparatus to illustrate Professor Tyndall's experiments on the action of Sonorous Vibrations on Gaseous and Liquid Jets; a collection of specimens illustrating the *British Pharmacopœia* of 1867; and the splendid portrait of Sir Thomas Watson, Bart., the late President of the College, painted by George Richmond, R. A. Refreshments were most liberally provided in the large room on the ground floor, looking into Trafalgar Square.

Whilst the College stands so deservedly high in public estimation, the profession is puzzled to understand the rules that guide the Council in their annual selection of the names for the fellowship, for it would seem as if persons, howsoever worthy in other respects, were selected for their being celebrated for nothing in particular, and certainly for their having

advanced science not in the least degree. Therefore the fellowship, like that of the Royal Society, does not carry the weight with it that it would otherwise do. In fact it is an honour to be a *member* and not a *fellow*, until some change is effected.

Since my last letter, the veteran Lawrence has been struck down, and has passed away from among us. He was not long permitted to enjoy his newly acquired honours. It is just twenty years ago since we were first introduced to him, and although he was then over sixty, his activity of mind and brilliancy of operation were conspicuous. He will be long remembered by the rising generation of Bartholemew's men, because he continued in harness almost to the last minute. He is succeeded by his second surviving son Trevor Lawrence, who was a Surgeon in the East India Company's service.

If the profession, in the death of Sir William Lawrence, have lost a Medical Baronet, they have gained another in the accession of Sir Duncan Gibb to the family honours. He acquires his rank with some prestige, for he has not only made himself a name by his numerous researches both in Medicine and Science which have rendered him worthy of the honor, but he has succeeded to one of the oldest Scottish baronetcies in the kingdom, the date of its creation being 1634. As Sir Duncan is a Canadian by birth, we must be excused for stating that we have been informed on the best authority that his ancestor, the first Baronet, was a Groom of the Bedchamber to Henry, Prince of Wales, and on his death, in 1612, to James I; whilst his father before him was Groom of the Bed Chamber of James I for the long period of 40 years, from the time that the King was a lad of 10 or 12 years of age. The family originally came from Linlithgow, but the baronetcy takes its family name from Falkland in Fife, in the vaults of the old palace of which town are buried the remains of the first Baronet. Various rumours are afloat concerning Sir Duncan Gibb, such as, that he is about to retire from practice, that he has been requested to stand as member of one of the new Boroughs, that he is going to reside in Scotland, &c., but we do not vouch for the truth of any of them.

There is an *on dit* current, of an attempted act of gross injustice at the Hospital for Consumption, Brompton, which has not found its way into the Medical Journals. Dr. Hamilton Roe—a man by no means popular in the profession—on his retirement from the Hospital was made one of the consulting Physicians, but at the election strenuous efforts were made to place him above some of the other consulting physicians. This the committee would not stand, and the previously concerted plan was defeated. Such a thing has never before been known or heard of,

and has excited great indignation against those (and their names are well known) who wanted to play off this trick. The great authorities on chest disease now in London, are Dr. Walsh and Dr. Scott Alison, and for diseases of the heart more particularly, Dr. Peacock, all good men and true. Dr. Pollock is a rising man, but has laid himself open to ridicule by the pedantic title of his work on consumption which is styled "The Elements of Prognosis in Diseases of the Chest, &c." Ye Gods!! fancy such a title as "The Elements of Diagnosis in Diseases of the Tongue." Yet one is just as sensible as the other. The vacancy created by the retirement of Dr. Roe, has been filled by the election of Dr. Williams, a son of Dr. C. J. B. Williams, a promising youth.

The Princess of Wales has so far recovered that she has been out several times for an airing, and she is shortly to proceed to one of the German watering places celebrated for its virtues in Rheumatism. Her illness has been a great draw-back to London Society, for she was deservedly popular. Her surgeons, Mr. Paget and Mr. Prescott Hewett, have acquired great credit, for the care and good management they devoted to the treatment of her complicated arthritic affection. They will acquire their well merited reward ere long. It is expected that the honour of knighthood will shortly be conferred upon Mr. Henry Thompson, one of the most affable as well as most skilful of London surgeons. His kindness to strangers, we are sure many gentlemen in Canada can testify to.

Of arrivals from Canada, we have heard of Dr. Hingeston who is now in France and Dr. F. W. Campbell at present in Glasgow. The meeting of the British Medical Association next week in Dublin may probably induce them to visit Ireland. Dr. Malloch—one of the most promising of Canadian graduates—passed through London on his way to Canada last week, after a year's sojourn in France. He has been a most industrious and persevering student, and carries back with him the best wishes of all his friends here for his success in life.

In my next letter some space shall be devoted to the doings of the expected meeting of the British Association for the advancement of Science at Dundee, in September, under the presidency of the Duke of Buccleugh. We purpose at the same time to get a few whiffs of air amongst the romantic scenery of the Highlands.

London, July 25th, 1867.

PERISCOPIIC DEPARTMENT.

Surgery.

.CASE OF GUNSHOT WOUND OF THE HEAD AND BRAIN—RECOVERY.

By JAS. S. WASHINGTON, M. D., Indian Bay, Arkansas.

On the fourth of December last, I was summoned to a negro boy, about 22 years of age, who had been shot from a revolver, the ball taking effect about the commencement of the temporal ridge, left side, passing transversely through the brain, and lodging, I presume, about the junction of the parietal and occipital bones, as near as I could judge from the probe and position when shot, as the ball did not emerge from the skull.

I saw the boy within an hour from the occurrence of the accident; he was then stretched upon his bed, near where he had fallen, in a supine condition; the pulse sixty per minute, tremulous and weak; coma; eyes half opened and very dull; breathing labored and stertorous at times, and he could not be aroused by any means from insensibility; had two convulsions when my probe touched the brain. He lost ten ounces of blood and one teaspoonful of cerebral matter. I carefully removed all blood, etc., from the wound, applied cold cloths to the head, and left him, with orders to be kept quiet, and the cuticular surface to be kept warm by means of hot bricks to the extremities.

5th.—I saw the boy again, still in a comatose condition; breathing more calm; pulse seventy, full and regular. Was ordered xv grs. hyd. chlor. mitis, and the above continued.

6th.—Pulse the same; breathing not at all labored; head cool and pleasant. Made water twice, freely, through the night, rising to his feet for that purpose. As his bowels had not been moved for three days, I again repeated the dose of hyd. chlor. mitis, placing it dry upon his tongue, as he would immediately reject any fluid put into his mouth.

8th.—A good evacuation obtained through the night, pulse seventy-two, about his natural standard; sitting up at the fire, but apparently unconscious of all passing around him; ate an apple, but refused all other nourishment, dashing water or coffee to the floor, when offered him. The above dose hyd. chlor. mitis. repeated, and cold to the head continued.

10th.—Pulse yet the same; right arm and hand paralyzed, lifting it about with left hand; no excitement about the brain: wound healing externally very fast.

12th.—Found patient again at the fire; ate greedily any article of food given him; pulse still regular; bowels moved once, getting up as usual on the floor; has not spoken since wounded, but manifests a returning consciousness, by assisting to dress himself with left hand, etc. His diet has been mild, and room kept quiet.

15th.—Very much improved both mentally and physically, possessing all his faculties, excepting a slight imperfection in power of speech, walking about the yard without assistance.

Dec. 30th.—Nothing of interest has occurred from last visit up to this date, except an occasional pain in the forehead. Upon examination I found the orifice had closed. I made an opening with a probe, evacuated a small quantity of pus, gave a saline cathartic, and the symptoms soon disappeared.

Jan. 15th.—Patient expresses himself well and able to do any kind of labor, and places himself under my employ for the ensuing year.

April 29th.—Five months have now elapsed since the boy was shot, and with the exception of not being able to grasp anything as small as a knife in right hand, a partial loss of power of speech, and a small fistulous opening from the wound, is as well and hearty as before the accident,

My opinion was repeatedly asked in regard to the recovery of this case, and I as often unhesitatingly gave an unfavorable reply; so this is one more case calculated to show the extreme caution necessary in prognosis after like injuries.—*Southern Journal of Medical Science.*

FRACTURE OF HUMERUS AT SURGICAL NECK.

SURGICAL CLINIC OF DR. AGNEW, PENNSYLVANIA HOSPITAL.

This man some days ago fell from the third story of a building and struck on his shoulder. When he came into the hospital he was unable to raise his right arm; was suffering from a great deal of acute pain, and there was some discoloration and swelling about the shoulder. Examination showed a fracture in the surgical neck of the humerus, a not uncommon accident in this hospital.

This fracture is sometimes overlooked in consequence of its being situated so high up and buried underneath the deltoid muscle, still it is not very difficult to recognize. On raising up the arm, if there has been a separation in the continuity of the bone, there must be an angular deformity, which may be felt with the fingers in the axila. Crepitation can usually be produced, which can be both felt and heard. The displacement which occur are as follows: the lower end of the upper fragment

is tilted upwards and rotated inwards. Upwards by the supra-spinatus muscle, which passing underneath the acromion process to its insertion in the greater tuberosity, near the head of the humerus, is in a favorable position to produce that deformity, rotated inward by the subscapularies; the lower fragment is drawn in towards the side by the action of the latissimus dorsi and the pectoral muscles and upwards, (thus shortening the distance between the acromion process and external condyle,) by the action of the clavicular fibres of the great pectoral muscles and the deltoid. The arm is therefore usually found shortened after this accident, and the lower fragment towards the body and in the axilla. Sometimes when the fracture has been attended with contusion and much injury of the soft parts and the obliquity of the fracture has been such as to produce a sharp point, this will be drawn up in contact with the axillary plexus of nerves, and great suffering will be experienced by the patient.

In the treatment, the first thing to be done is to restore the parts to their proper position. Sometimes, in a little while after the muscles have become weary, the weight of the arm will in a measure draw the lower fragment down. This should not be waited for, however, but the parts should be replaced by making traction on the elbow joint, and then bringing the arm to the side of the body, thus at once, by relaxing them, setting aside the displacing power of the pectoral and latissimus dorsi muscles. A little traction of the arm, with the introduction of the finger on the inside of the humerus far into the axilla to mould the fragments into position, is all that is necessary for their proper restoration. To retain them so, the simplest and most efficient method is to surround the arm by a spiral reverse from the fingers to the shoulder, for the purpose of controlling muscular action, giving a proper support to the capillaries and preventing swelling, and then to place an internal angular splint on the inside of the arm, a piece of muslin being interspersed between it and the side of the body to prevent excoriation.

It is regarded by some as very essential that there shall be a wedge shaped pad inserted between the side of the body and arm, but cases do not always demand the insertion of such a pad. There is a belief that it counteracts the tendency of the latissimus dorsi and pectoral muscles to draw inwards the lower fragment, but this is done away with by their relaxation effected by the placing of the arm at the side.

On the outside of the arm a concave splint is placed, made of a piece of binder's board of a length equal to the distance from the acromion process to the external condyle, and of a breadth sufficient when placed in hot water and applied to the arm, to pass around the an-

terior and posterior portions to the angular splint on the inner side. This should be modeled so as to extend over and fit the shoulder. The value of having it rest against the acromion process is that a point of resistance is thus obtained, so that the fragments can be brought firmly in contact with each other, and the lower fragment kept outward on the application of the bandage. A bandage is then applied over the splint, and the arm secured to the body by a thin roller, using a sling to support the forearm, the elbow being left free so that the weight of the arm may act as an extending force.

A variety of splints may be employed; for instance, vulcanized rubber makes a very elegant material. The great object in the treatment of fractures is to simplify the subject and use the simplest and cheapest dressings that will accord with efficiency. If equally as good results can be accomplished with cheap binder's board and a shingle as with the most costly rubber, why not employ them?

The internal angular splint should extend up to the axilla, oakum or cotton being used to ward off pressure. As the dressings are repeated the angle of the splint should be altered. The tendency is always for the arm to become somewhat stiff at the elbow, but by changing the angle of the splint a little passive motion is kept up, which will not at all interfere with the proper relation of the fragments. The use of the internal angular splint is to prevent the patient from extending his arm, which of itself would be sufficient to produce displacement.—*Philadelphia Medical and Surgical Reporter*.

ON LIGATION OF VEINS.

BY JNO. N. MONMONIER, M. D., OF BALTIMORE, MD.

In the time of our predecessors, the application of a ligature to a vein, particularly a large trunk, was generally regarded as a certain and sure cause of inflammation of the vessel, pyæmia and consequently death. Until the occurrence of the recent civil war, I must acknowledge that my mind was considerably impressed with the same idea; but during the conflict I met with many cases of alarming venous hemorrhage, caused either by the instruments of warfare or the surgeon's knife, which did not yield to the ordinary hæmostatics, pressure, torsion, cold applications, etc. These cases were of such frequent occurrence that I was compelled to regard the application of the ligature as a *dernier-resort* for arresting the flow of blood. I encountered, from this cause, much difficulty and annoyance in amputations, especially of the thigh and leg, and also in the extirpation of tumors. It is true that in many of the cases operated upon there existed a hemorrhagic diathesis or a

scorbutic condition of the system, wherein hemorrhage was more likely to occur and become troublesome. Heretofore the supposed dangers of tying a vein were *phlebitis* and *pyæmia*, and for this reason many surgeons refrained from performing the operation. But I must say from personal experience and extensive observation during the war, I saw but few cases which terminated in either of these affections. Some ended in secondary hemorrhage, which, I believe, is far more apt to supervene. Secondary hemorrhage from the internal jugular vein, following the ligation of this vessel, was comparatively a very common occurrence. I observed phlebitis and pyæmia were more frequently produced by lacerated, punctured or contused wounds, than those inflicted by the knife and the irritation caused by the application of the ligature.

As all my accurate notes and records of cases were either lost or destroyed with the surrender of the Army of Northern Virginia, my statements are mostly made from memory. The following are some of the few cases, operated upon by myself, which I propose to mention.

In thirty or forty cases of amputation of the thigh the femoral vein was ligated with no bad result, excepting in one where pyæmia followed and resulted fatally on the eighth or tenth day after the operation. In one case of a wound of the femoral vein, caused by thrust of a bayonet, the ligature was applied and gangrene of the lower extremity followed about the fifth or sixth day.

In one case of the brachial artery, partially severed, with entire severance of the axillary vein, the hemorrhage from the latter vessel not yielding to pressure, the ligature was applied and with no serious result. A soldier was wounded in the left external carotid artery and internal jugular vein, by a carbine ball which emerged posteriorly near the base of the cranium. This was one of the cases of wounding of these vessels which instantly proves fatal if the surgeon is not at hand to give immediate assistance. At the time the man received the injury a surgeon was by his side, who instantly stuffed the wound full of lint. This for a short space of time arrested the hemorrhage. I operated upon the case, tying the common carotid, for the wound in the external carotid was so near the bifurcation as to preclude the possibility of ligating it. After trying the ordinary measures to arrest the hemorrhage from the vein, and failing, I did not hesitate also to ligate it. Secondary hemorrhage did not follow the application of the ligature, and the patient entirely recovered. In some fifteen or twenty cases of amputation of the fore arm the *median* and *basilic* veins were ligated, as the hemorrhage from them was obstinate. In two of these cases secondary hemorrhage supervened. In one pyæmia. The sutures most generally used in these cases were silk, and in some few, silver wire and horse hair.—*Philadelphia Medical and Surgical Journal*,

TREATMENT OF ANEURISM; ADVANTAGES OF COMPLETELY ARRESTING THE CURRENT THROUGH THE SAC.

BY E. D. MAPOTHER, M. D., OF DUBLIN.

The treatment of aneurism by compression had been established in Dublin, but the principle on which the cure was sought for seemed to the author to be erroneous. It was to lessen the current through the artery leading to the sac, layers of fibrine being expected to form within the latter. The author contended that there was no pathological evidence that such occurred; and asserted that the cure was accomplished by sudden clotting, dependent on the pressure being made complete for some minutes, or perhaps hours, during the protracted treatment, which had averaged twenty-five days. He detailed two cases, in which complete arrest of the current had succeeded; in one, an ilio-femoral sac became solid after pressure of four hours and a half on the common iliac and superficial femoral arteries. In a popliteal case, pressure on the femoral had cured in nine hours and a half. Chloroform in both cases was kept up during the whole period of pressure. Dr. Mapother adduced several facts and arguments to prove that aneurisms may be cured by clotting; the proximal pressure being complete, and the sac being kept full by distal pressure, as suggested by Dr. O'Ferrall, or by flexion in popliteal cases as applied by Mr. Hart. Relapse, or suppuration, were improbable, and embolism less likely to occur than in the mode of compression heretofore advocated. Chloroform was a necessary adjuvant to this method of clotting by complete compression.—*British Medical Journal*.

ON THE TREATMENT OF ELEPHANTIASIS BY LIGATURE OF THE MAIN ARTERY OF THE LIMB; WITH A CASE IN WHICH CURE WAS EFFECTED BY LIGATURE OF THE EXTERNAL ILIAC ARTERY.

BY GEORGE BUCHANAN, A. M., M. D., OF GLASGOW.

Dr. Buchanan began his paper by stating the objections which had been urged against the operation, and combating these by arguments which he believed sufficient to establish its utility and propriety. In particular, he urged that the success which had attended the operation in the cases already recorded was quite conclusive evidence in its favour. He then proceeded to narrate the case which had occurred in his own practice. Jane O., had suffered from elephantiasis of the left leg for several years before she applied to Dr. Buchanan in November 1866. The disease began, five years before that date, with an attack of erysipelas, which on passing off, left the leg somewhat swollen. Successive attacks of erysipelas were followed each by an additional enlargement, till the

limb assumed the present size. She was treated at the Dispensary for Skin Diseases for some time; and the rest and other appropriate treatment enjoined seemed to have had the effect of slightly diminishing the size; but the result was so trifling that she was recommended to Dr. Buchanan for surgical treatment. On admission to the Royal Infirmary, the measurements of the limb were, round the ankle, 18 inches; round the calf, 26 inches; round the middle of the thigh, 23 inches. On December 21st, 1866, Dr. Buchanan applied a ligature to the external iliac artery. The day after the operation the tissues were softer, and on the 25th were decidedly flabby. On that day, the measurements were: round the ankle, $16\frac{1}{2}$ inches; calf $21\frac{1}{2}$ inches; thigh, $22\frac{1}{2}$ inches. The ligature came away on the thirteenth day, and the wound slowly healed. She made a good recovery; and at the date of her dismissal, April 30th, 1867, the measurements were: round ankle, $14\frac{1}{2}$; calf, 17; thigh, 20. The case might, therefore, be accepted as another proof of the efficacy of Dr. Carnochan's proposal. Dr. Buchanan concluded by remarking that the mode of action of the operation might be referred to the combination of two principles: first, the ligature of the artery, by diminishing the amount of blood entering the leg, will cut off that of the supply producing the overgrowth; secondly, by reducing the force of the circulation, it will induce the condition most favourable to the activity of absorption.—*British Medical Journal*.

LIGATION OF THE COMMON CAROTID.

BY H. WARDNER, M. D., Of Cairo, Illinois.

Adolph Bion, an artillery soldier, while stationed at Corinth, Miss., in August, 1862, received an incised wound in the right side of the neck, from the sharp edge of a heavy piece of glass (the bottom of a brandy bottle), opening the external carotid near the bifurcation. The accident occurred about six o'clock, P. M. The hemorrhage was very profuse, but was partially checked by a compress and roller wound several times *around* the neck by some representative of the medical staff who chanced to the present, and by syncope, which succeeded each fresh outburst of blood.

I saw the patient about $9\frac{1}{2}$ o'clock the same evening. He was lying in the open air upon the ground, his face, lips, and tongue entirely bloodless, his wrist almost entirely pulseless, and he was incapable of answering any questions. Fresh arterial blood was continually escaping from under the dressings.

I immediately cut away the bandage, and removed a large clot which had formed in the wound, and which was pressing upon the trachea so that he breathed with difficulty. His breathing was instantly relieved. There was a sudden gush of blood which had been accumulating in the wound and areolar tissue. The common carotid was then compressed with my thumb, and held for one hour, when he opened his eyes, and I noticed a little, very little, color returning to the lips. He asked for water, which was given him. After another hour, I placed a hard roller upon the artery, instead of my thumb, and held it in its position by laying one end of a stick of wood upon it. A man was stationed on each side of him, with strict orders not to allow him to move a muscle until morning.

(There were two reasons for not ligating the artery at once. 1st. It did not appear possible that the man could revive; and, 2d. There was but one solitary candle at hand, which but little more than made visible the intense darkness of a very cloudy, moonless night.)

At 8, A. M., I was notified that the man was alive and feeling well, and that he had not stirred a hand or foot. A half-hour later, I was again notified that in attempting to urinate, he had moved his head a little, when the blood gushed out again. In a few moments I was at the spot ready to apply the ligature. He had fainted, and the moment was seized to take up the common carotid, which was tied just above the omo-hyoid. The vessel was not tied above the wound. No further hemorrhage occurred at the time, and under careful diet he slowly recovered. The ligature came away on the eleventh day. At the expiration of five weeks he was able to walk a few rods with help. During the sixth week, it became necessary to remove him about one mile, to the Central Hospital. He was taken in an army baggage-wagon, which was driven half the distance over a very rough corduroy road. The ride wearied him and caused a good deal of arterial excitement, with tendency to congestion of the head. During the following night he had an attack of hemorrhage from the wound, which had not entirely closed, which returned during the three succeeding nights. A tent was introduced and pushed to the bottom of the wound, and then saturated with the solution of the persulphate of iron, and allowed to remain until it was discharged by suppuration. He was treated with *veratrum viride*, and kept on a low diet. The hemorrhage did not return. He slowly recovered, was discharged from service, and is now in business connected with a firm in St. Louis.—*St. Louis Medical and Surgical Reporter.*

Medicine.

TREATMENT OF WHOOPING COUGH IN THE LONDON HOSPITALS.

Every old woman has a certain cure for whooping cough. There is probably no ailment which has offered a finer field of enterprise to the empiric. It will be seen that the experience of our hospital physicians is for the most part against curative effect of any remedy in this complaint, although due credit is accorded to the relief which may be given by the use of certain drugs.

St. Thomas' Hospital.—In the department for children's diseases at this hospital cases of whooping-cough have been unusually numerous during the past eighteen months. For the most part the cases presenting themselves have been of from one to three weeks' standing, although not a few cases which have lasted for as many months apply from time to time for treatment. As a rule, the more recent cases are complicated with a varying amount of bronchial catarrh—the catarrh, that is, of the first stage, lingering on and not unfrequently increasing after the pertussis has become fully developed; and the treatment pursued by Dr. Gervis in these cases has, therefore, generally a necessary reference to this condition. The usual prescription, for instance, for a child of four years would be more or less as follows:—P. L. Solution of acetate of ammonia, half an ounce; spirit of nitric ether, one drachm; chloric ether, half a drachm; oxymel of squills, one drachm and a half; syrup of tolu, two drachms; water to two ounces, two teaspoonfuls every six hours. In addition to this medicine, of which the chloric ether is the permanent element, and the other constituents the variable, Dr. Gervis lays much stress upon the use of the chloroform liniment, directing that it is to be rubbed into the chest both anteriorly and posteriorly night and morning. Under this treatment, and with the usual directions as to diet and regimen, there is almost invariably considerable improvement within a week, and very frequently within ten days or a fortnight the “whoop” has quite passed off, although some amount of cough may linger for a little while, and require appropriate treatment. In more chronic cases, and where there is little or no bronchial disturbance, alum is substituted for the saline in combination with chloric ether; and, as in the other class of cases, the chloroform liniment is employed externally. If in cases where the catarrhal symptoms have subsided, but where the whoop remains, there should be much debility, the combination of quinine with the alum and chloric ether is very advantageous. If symptoms of cerebral irritation, with or without convulsions should occur, Dr. Gervis has repeatedly obtained the greatest advantage

from small doses of morphia; and this both in cases where no remedial measure for the complication have been previously tried, and in others where antiphlogistic treatment—leeches, calomel, blisters—has been assiduously but unavailingly adopted. In many such cases this medicine has acted as a charm, quieting both the pulmonary and cerebral disturbance.

St. George's Hospital.—Dr. Dickinson says we neither know its seat nor its antidote. It runs its appointed course regardless of the Pharmacopœia. A more or less persevering trial of most of the remedies which have been urged as able to cut short the disease has resulted in failure. Expectorants, remedies reputed as antiphlogistic, drugs which have no repute except as cures for whooping cough, irritating applications, including Roche's embrocation, alum, nitric acid, bromide of ammonium—these and others have been tried by Dr. Dickinson, and found wanting. As regards the disease in question, such remedies may be divided into two classes—those which do harm, and those which do good. Antimonials and all such remedies of the depressing class, appear to be injurious by lowering the patient without touching the disease; while the most that can be said for nitric acid and bromide of ammonium is that where they are given in small doses they do no obvious mischief. Whooping-cough appears to be as essentially incurable as typhus or any of the specific fevers. At the same time, good may be done by meeting urgent symptoms as they arise, and by directing treatment to the various complications which are apt to endanger the patient.

When the spasmodic cough is violent and threatening, as is apt to be the case in the later stages of the disease, medicines which act as sedatives may be given with advantage. Opium is sometimes useful under these circumstances, sometimes belladonna; hydrocyanic acid is better than either. The dilute acid of the Pharmacopœia, in minim or half-minim doses, according to the age of the child, is more effectual than anything else in diminishing the laryngeal spasm, which is often a source of danger.

King's College Hospital.—In the out-patient department of this hospital in the early stages of whooping-cough the simplest expectorants only are employed by Dr. W. S. Playfair. When the disease is more fully developed, the bromides either of potassium or ammonium (for there appears to be no marked difference in the action of the two salts), have been on the whole more frequently used than any other drugs. They have been generally given in doses of a grain for each year of the child's age, increasing the amount gradually if they seem to be of service. In a large number of cases the use of this medicine has been attended by marked benefit; often it has failed to be of service, even in cases apparently the best suited

for its employment. The class of cases in which it most frequently proves beneficial are those in which the paroxysms are very frequent and severe, indicating much implication of the nervous system. In such it often quiets the convulsive cough in a most remarkable manner.

The next most useful remedy has been found to be belladonna, which is generally tried when the bromides have failed. In the more advanced stages of the disease, and in very feeble children, it has been found of much use given in combination with cod-liver oil and syrup of iodide of iron. In the weak and cachectic children that attend the out-patient department of a large hospital the use of some such tonic may be considered absolutely essential, and the above combination has been found to be very valuable.

Minute doses of hydrocyanic acid, generally combined with some preparation of bark, are sometimes serviceable. It seems to act best in the same class of cases as the bromides, but appears to be less generally efficacious. Its frequent failure may, perhaps, be in part ascribed to the care required in prescribing so powerful a remedy in out-door practice, where mistakes are necessarily frequent, and where the effects of particular drugs cannot be carefully watched.

The frequency of secondary chest complications has been remarked—the inevitable consequence of bringing the children to the hospital in all kinds of weather. It has been found that any depressing treatment is worse than useless when such complications arise, and that they are best treated by enveloping the chest in large linseed-meal poultices, or in damped cotton wadding and oiled silk, along with mild counter-irritating embrocations. Small doses of sesquicarbonate of ammonia and chloric ether have generally been given internally, with nourishing diet, and stimulants when necessary.

Westminster Hospital.—It is now some thirteen years since Dr. Gibb submitted to the notice of the profession his mode of treatment of whooping-cough by nitric acid in a monograph on that disease. A large experience of its use since then, both in public and private practice, has convinced him of its great value, and that he had not exaggerated its good effects. Its internal use he has found not only serviceable in curing the pertussal malady, but at the same time prophylactic against intercurrent throat complications. His formula consists of an ounce of the dilute nitric acid, four drachms of compound tincture of cardamoms, and enough simple syrup to make a six-ounce mixture. For an infant the dose is a teaspoonful every three or four hours, and for children from two to five years of age two or three drachms at the same periods. Occasionally he has found it convenient to add an ounce of glycerine, diminishing the mixture by an equal quantity of the syrup is liked by the child and is

well borne, and the good effects are very speedily visible in diminishing the severity and frequency of the spasms. According to the frequency of the paroxysms, together with their violence, severity, and duration, so is there soreness or uneasiness at the upper part of the larynx; this Dr. Gibb obviates by the topical use of a solution of nitrate of silver to the larynx (twenty grains to the ounce) by means of a curved brush.

The advantage of the nitric-acid treatment is that it can be given in the three stages of the disease. When the nervous element, however, is very strong, and there are manifestations of cerebral irritation, Dr. Gibb has substituted the bromide of ammonium for the nitric acid, in doses of from four to fifteen grains according to age, combined with ipecacuanha wine and occasionally small doses of sulphate of zinc. Provided there are no dangerous or severe complications requiring special measures, it has been found that each of these two modes of treatment proves successful in curing the great majority of cases; and we are told it is somewhat unusual, unless when easterly winds are prevailing, for children at Westminster Hospital to remain longer under treatment than from two to five weeks. In very young children and infants, a few doses sometimes of the nitric-acid mixture are sufficient to effect a cure; and if the little patients are carefully looked after, warmly clad, and properly fed, there is no recurrence of the disease.

In many hundreds of examinations Dr. Gibb has found the fact hold good, which he was the first to announce many years ago, that the urine in pertussis is almost invariably saccharine.

Foundling Hospital.—During the latter half of the year 1866, Dr. Julius Pollock tells us, an outbreak of whooping-cough occurred at this hospital. It commenced in July and terminated in September. There were in all 26 cases, the ages of the children being from three to six years. There were no deaths. The longest case was 103 days; the shortest 21 days; average, 50 days.

In the treatment the following were tried;—Conium, bromide of potassium, dilute hydrocyanic acid, alum, antimony, ipecacuanha, compound tincture of camphor, and oil of amber. Inhalation of the vapour of chloroform; painting with iodide liniment (B.P.) along the track of the cervical glands. Emetics were generally given at the commencement (ipecacuanha powder, ten to twenty grains), and occasionally in the course of the disorder if the chest seemed choked with phlegm.

The bromide of potassium was found to have no effect, nor did conium appear to have any advantage over opium. The iodine liniment to the neck did nothing. The vapour of chloroform seemed to check the spasm, but, owing to the difficulty of administering it, was not much tried. No

remedy appeared to shorten in any way the disease, but the most useful treatment was found to be the following:—To keep the room warm (50° to 60°); to give emetics at the beginning, and, when necessary, occasionally during the disease; to keep the bowels freely open; and to give the following mixture three times daily:—Dilute hydrocyanic acid, one to two minims; ipecacuanha wine, five to ten minims; compound tincture of camphor, ten to twenty minims; water, half an ounce.—*Lancet*, April 27, 1867.

ON THE USE OF STRYCHNINE IN EPILEPSY.

By WALTER TYRELL, M.R.C.S.

The action of strychnia in producing spasms and convulsions in the healthy subject, closely allied to, if not identical with, those of epilepsy, is, of course, known to us all. My object in the present paper is to call the attention of the Profession to the remarkable power which that drug possesses of controlling and altering those attacks in the epileptic. I made my first trial of strychnine in epilepsy in 1860, and was led to do so by reading a passage in Professor Van der Kolk's work on epilepsy published by the New Sydenham Society in that year. He states (see page 256) that he was led to try the effect of conia in epilepsy from observing the manner in which that drug controlled the convulsions produced by strychnia. He accordingly placed three epileptics under this drug. So early, however, as the second and third days, he was obliged to give up its use, as the attacks were so decidedly increased, both in severity and number. It was from this that I was first led to look to strychnia for the means of controlling epileptic convulsions. It being plain that conia, which controls the convulsions of strychnia, increases those of epilepsy, is it not probable that strychnia, acting, as we know it does, directly upon the spot we are now taught to consider the seat in which convulsion arises, may control the attacks in the epileptic? The first case in which I made use of strychnia occurred in the early part of 1860, in a young gentleman, aged 28, who had been for some time losing flesh and strength, and had been latterly subject to attacks of "*petite mal*." These culminated at last in a severe convulsive attack, in which he bit his tongue. After giving him rules for diet, exercise, etc., I prescribed for him the sixteenth part of a grain of the sulphate of strychnine, to be taken twice daily in solution. Under this treatment, which he continued for two months, he at that time entirely recovered, having no further attack, and improved in a most marked manner in health and strength. He had a slight tendency to relapse after about a year, which yielded at

once to a return to the strychnine ; since that time he has continued perfectly well. Though this was a favourable case for any treatment, yet its result was especially encouraging to me, as tending to prove that strychnia certainly did not *increase* the tendency to convulsions. Since that date I have treated sixty-nine cases of epilepsy with strychnine, some in America, some in England : and although in many cases I am unable to give the result, owing to my losing sight of the patient, I have seen as yet no case in which the strychnine did not exhibit a marked power in controlling and altering the convulsive attacks.

As my space is very limited, I shall confine myself to a few cases, choosing those in which the exciting causes of the disease appear to be different. In 1863, I saw a child, aged 6, suffering from a severe form of "*petit mal*." The disease had existed almost from birth. The attacks, which were very frequent, were unattended with convulsion, beyond an occasional stiffening of the right arm. She was semi-conscious during some attacks, perfectly unconscious during others. She sometimes fell. She had been under a variety of treatment—iodide of potassium, iron, valerian, etc. She entirely recovered under small doses of strychnine after one slight relapse.

Severe convulsive epilepsy, partial paralysis, resulting from masturbation ; J.P., aged 26 ; six years epileptic, last two years almost idiotic ; attacks, two or three in the day, varied much in intensity ; often bit his tongue ; partial paralysis of bladder and tongue. The effect of strychnine here was most marked. Fits at once diminished, both in severity and number. Paralysis decreased very much. Ultimately fits ceased ; memory improved greatly.

S. T., aged 38, had epilepsy fourteen years. Fits come on once in a week or ten days, probably excited by some gastric irritation, as they often occur after meals. In this case, from the first taking strychnine, the interval was ninety-six days, when an indiscretion in diet produced a slight attack, the last. He continued strychnine for ten months. Is now quite well.

J. S., a clerk, unmarried, has led a very irregular life. The fits, which have continued at irregular intervals for six years, were dependent on irregular circulation probably. In this case I found the combination of strychnine and digitalis very useful. He had suffered from delirium tremens. He is now quite well.

M. B., aged 24. Epilepsy, dependent on menstrual irregularity. A strong plethoric girl, subject to epilepsy for six years. First occurred after a stoppage of menstruation from cold. Fits violently convulsive : interval irregular. Here strychnine, with aloes and antimony, produced an entire, cessation of fits.

I have lately seen E. H., aged 34. Attacks dependent on deranged menstruation. In this case the fits, which occurred every week or ten days, have been entirely absent since taking strychnine, now four months. Menstrual regularity restored.

The following case I give at length, as I think it will be allowed to have been a most unfavorable one for treatment, owing to the length of time that the fits had existed, and also to the early age at which they came on. I give the case in the words of Mr. Swinhoe, Surgeon, Swindon, Wilts:—"Thomas F., aged 20, first had convulsive attacks at the age of 13 months, which have continued at intervals ever since. Has never had less than two or three in the week. First seen by Mr. Tyrrell in August, 1866, at which time he frequently had two fits in the day. Ordered to take strychnine, which at first made him feel giddy, and twice a fit followed its administration; but by a little management and attention to bowels the strychnine became tolerated. He has now taken it in small doses for about five months. His present condition is as follows:—The fits, which never occur oftener than once a week, are more like fainting fits than epilepsy, and he is much better in health and more cheerful; in fact, in this most unpromising case the strychnine has proved of the utmost benefit." I may add that Mr. Swinhoe has another and most severe case under similar treatment, and doing very well.

In the following case, where the attacks are certainly due to derangement of circulation, the same change in the character of the attacks was observed; and from being violently convulsive they have become more like syncope, except that she is partially conscious throughout them:—J. K., aged 50, suffered from epilepsy twelve years; attacks very frequent; violently convulsive; circulation very irregular; suffers much from palpitation. Commenced strychnine November, 1866. Attacks now two in the week, formerly two and three in a day. (February, 1866)

Having now laid before you the practical effects of strychnine in controlling and modifying the epileptic attacks I will endeavour to show the manner in which I believe it to act. I believe that, to have convulsion at all, you must first have existing a peculiar nervous sensibility, and by nervous sensibility I mean a condition not of nervous strength, but of weakness—an increased sensibility, with a lessened power of control. This condition being present, I believe that convulsions may be produced by two great exciting causes:—

1. Derangement of circulation in and about the medulla oblongata.
2. Nervous irritation, either centric or centripetal, to borrow Marshall Hall's terms.

In our treatment of epilepsy hitherto, I think that we have been look-

ing too much to the virtues of individual drugs. At one time zinc has been in favour, at another nitrate or oxide of silver has been in vogue; and all cases were treated with one drug, however various might be the exciting cause. Now, I think that in strychnine we possess a medicine which acts directly on the seat of the disease, as a controller of the convulsive attacks; but, at the same time, I think that, in almost all cases, we must remove the exciting cause, which I think in most cases it is not difficult to discover and obviate. Thus, supposing the attacks to be induced by a deranged circulation in and about the medulla oblongata, I think that digitalis will be found a very effective remedy; and derivatives, counter-irritation, etc., will also be found of great service. I have also used ice to the neck with great effect. When the exciting cause results from nervous irritation, I think that, having discovered the set of nerves which are giving rise to the irritation, it is almost always possible to relieve their excitability. Thus, the pneumogastric is undoubtedly a most frequent seat of irritation, and it is in these cases where nitrate of silver, the sulphates of zinc and copper act so well. Again, where the nerves of the uterus convey the irritation through the spinal cord, bromide of potassium will be found useful; and so on, through all the known causes of irritation. I would sum up by saying that I believe that in strychnine we possess a drug which will *always* control the excitability of the medulla oblongata and prevent convulsions, but that to cure the disease we must also remove the exciting cause.

I have now gone as far as my limits will allow me, but I hope in a future paper to lay before the Profession other important points in the cause and treatment of epilepsy.—*Medical Times and Gazette*.

Great Malvern.

ON SOME OF THE USES OF BROMIDE OF POTASSIUM.

By C. L. HUBBELL, M. D., of Troy, N. Y.

AMONG the remedies which have within the past few years been brought to the notice of the medical profession, there is scarcely one which, in my hands, has so seldom disappointed me, and so uniformly been of service in those diseases to which it is applicable, as bromide of potassium.

In an article published in the *Dublin Quarterly Journal*, in 1864, by Dr. McDonnell, of the Jervis Street Hospital, the attention of the profession is again called to this remedy, and its efficacy substantiated, by numerous cases of epilepsy in *males* and *females* successfully treated; and reference is made to Dr. Brown-Séquard, Dr. C. Bland Radcliffe and Sir C. Locock, all of whom had previously used it extensively, and with a great degree of success.

I propose to give the results of my own experience in its use, in epilepsy, in spermatorrhœa, and as a sedative in certain nervous diseases; and first of its effects in epilepsy, illustrated by a few cases.

CASE I.—Miss B., of this city, employed on a sewing machine in a collar factory, applied to me in the summer of 1863. She had one fit each month, usually a day or two before the appearance of the menses, which were neither profuse nor attended with great pain. She was otherwise perfectly well, but the fits were increasing in severity, and she had once fallen in the street. It was then nearly a year since the first attack. I gave her at once a solution of the bromide of the following strength:—Potass. Bromid., $\frac{z}{3}$ i.; aquæ, f $\frac{z}{3}$ viij. Dose, a teaspoonful after each meal. At the next menstrual period, when at work over her machine, she was seized with a sudden dizziness, but there was no convulsion and no loss of consciousness, and in a few moments she was able to resume her work. Encouraged by this effect of the medicine, I advised her to persevere in its use. She left the city shortly after, and I saw no more of her, but was told by an aunt of hers living here, that Miss B. continued to take the medicine for four months, that she had never had a fit since, and was about to be married—this was just a year after commencing the treatment.

CASE II.—Mrs. J., of Green Island, aged 48, of melancholy disposition, had never had any children; came under my care first in November, 1864, complaining of pain in the head, dizziness, "hot flushes," and various other symptoms, which sometimes attend upon that period known as the "turn of life." She was at times very despondent, and would shut herself up for days at a time, refusing to see any one. I prescribed such medicine as seemed appropriate to her condition, and which relieved her to some extent, when one evening I was sent for in haste to see her, and the messenger stated that she had had two fits in succession. Judging them to be probably hysterical, I carried over with me some fluid extract of valerian, but on arriving at the house, found that she had fallen suddenly, and without any warning—was greatly convulsed—in short, that I had to deal with epileptiform hysteria. Furthermore, I ascertained upon inquiry, that it was just the period in the month (six months having now elapsed since the last appearance of the menses) when she would have been unwell, had she been regular. I then commenced with the bromide, in the same doses as in Case I. She had twice afterwards, at intervals of about a fortnight, a light seizure in bed at night; then for two months there was no recurrence of the fits. She then discontinued the medicine, and began to have fits again, not so severe as at first, but sometimes two or three in a week. I then urged her to persevere with

the medicine, and increase the strength, giving of the bromide— \bar{z} ij- in water f \bar{z} viij.—a teaspoonful three times a day. This solution she took steadily for five months, and never had convulsion after the first dose; is now at this date in the best of health and spirits.

CASE III.—M. A. M., a stout, healthy-looking, intelligent Irish girl, 19 years of age, came to me from Williamstown, Mass., in June, 1866. Her mother, who came with her, stated that she began to menstruate at 14 years of age, and *always* at each period had one severe convulsion, usually falling when at her work, and was stupid and prostrated for the remainder of the day. In this case I used the doses, and felt perfectly confident, from the pathology of the case, in assuring my patient that she would be cured. In her first letter, written after the next period, and when she had taken the medicine only three weeks, she says: "I had a light fit this time, and got over it very soon; I am much encouraged, and think I shall get well." In the second letter, she says; "I am certainly getting better. I had no fit, but felt dizzy for a few moments, and held on to the table. In a few moments I got over it. I shall go on taking the medicine. I have great faith I shall be cured, for surely I am better these two months." I heard no more from this patient until January 1867, when she wrote that she "had no fits at all, thanks be to God." To this I would add respectfully, and with all reverence, thanks be to God, and Sir Charles Loeck, too, for it is to him that the unfortunate epileptics owe a debt of gratitude they can never discharge.

CASE IV.—E. S., of this city, clerk, aged 24, of good habits, but formerly used tobacco excessively; never contracted the habit of masturbation; since the age of 17 had severe epileptic fits, as often as once a fortnight, and at times twice a week: had frequently fallen in dangerous places, and sometimes been severely injured. He bears upon his face the scars of wounds received in his falls, and was known to several of our physicians and to our police as a confirmed epileptic. In May, 1866, when engaged in hoisting goods, he was suddenly seized, and fell from the third story of the store to the pavement beneath, a distance of thirty feet, fracturing his right thigh and one or more ribs. For a day or two his recovery was doubtful, but he got well, and with a good leg too. During his convalescence, Dr. Charles Freiot, his attending physician, advised him to try bromide of potassium for the cure of his epilepsy. This was in June. He took it but a short time, but enough to see that it exerted a controlling power over the disease. Owing to his lack of means, being out of employment, and the expensiveness of the medicine, he discontinued it during the summer. In November last he commenced taking it again, buying a quarter of a pound at a time, and mixing it him-

self—one ounce of the salt to a half pint of water—a teaspoonful three times a day. From that time to this day he has not had the slightest epileptic seizure, and expresses himself as feeling well and in excellent spirits. He has not yet discontinued the remedy altogether.

I might relate other successful cases, but these are enough for the pages of your JOURNAL, and enough to convince the most skeptical that, in cases of epilepsy, not having their origin in organic disease of the brain or spinal marrow, its bony walls or its membranes, we have a remedy which should be faithfully tried, and which will, in a large proportion of cases, effect prompt and permanent cures. "*Post hoc ergo propter hoc*" is, I am aware, the argument which too often attaches to some new remedy; but this will, I think, stand the test, if administered in those cases to which it is applicable. It is not infallible by any means, nor is any remedy for any disease.

In a future number, I will relate some cases illustrating the power of bromide of potassium in spermatorrhœa, together with such conclusions as I have arrived at from its use during the past five years.—*Boston Medical and Surgical Journal.*

THE TREATMENT OF PULMONARY CONSUMPTION.

By J. HENRY BENNET, M. D.

Dr. Henry Bennet commenced by stating that the subject of phthisis is so vast in itself, in its pathological affinities and connexions, that it would require not one, but twenty meetings, to discuss it in all its bearings. He should, therefore, confine himself to the consideration of treatment, merely making a few preliminary remarks on the general pathology of pulmonary tubercle. Whatever the opinions entertained respecting the origin and nature of tubercle, it was now generally acknowledged that its deposit in the lungs and elsewhere was the result of defective nutrition, itself the result of a lowered state of vitality, hereditary or acquired. It is a sign of vital decay; the forerunner of eventual death, if unchecked; a mere mode of dying. Looking at the subject in a philosophical point of view, tuberculisation was not a scourge or pestilence, but one of the means by which Providence purifies the human race, weeding it of effete, worn-out organisations, unfit to perpetuate it in conditions of health and vigour. Were not such laws in operation, the human race would, in a few generations, become one of dwarfs, pigmies of misshapen diseased abortions. The attention of thinkers has been much directed to the struggle for life which pertains in wild nature. Effete, worn-out organisations are not allowed to exist. They either die from

want of power to procure the means of existence, or are exterminated by their natural enemies. But man has intellect; can provide for his own old age, and for the sickly existence of his sickly progeny. He has passions, desires shared by the weak as well as the strong, and thus society is full of effete organisations, which propagate the race as well their stronger brethren. But here the laws of Providence come in to correct our errors. The strong in life, in youth and vitality, give the same principle to their progeny; but the weak, the sickly, the old, cannot give what they have not got. Their children are born with the seeds of disease and death in them, and die of tubercular meningitis, scrofula, and consumption. Thus is the integrity, the sanctity, of the human race preserved. If these views are correct, if the deposit of pulmonary tubercle is the result of lowered vitality, the treatment of the disease must be essentially sthenic. In the hereditary form, we have to endeavour to renovate, to prolong, a life naturally drawing to its close. In the acquired accidental form, we must, also, try to vitalise the economy, to restore the healthy play of disordered functions, and thus to arrest the fatal progress of the disease. To accomplish these ends, the application of the laws of healthy life, of hygiene, affords us infinitely more scope than mere medicinal agents. These laws must be rigorously applied. The patient must be removed from all unfavourable influences; must live in the country if possible, in the pure air night and day—a condition which can only be accomplished by allowing a current of air to pass through the room in which he or she lives. The functions of the skin must be steadily favoured by cold or tepid sponging daily and frictions in all conditions of disease. The food should be as nourishing and abundant as the stomach will bear. Life must be passed out of doors as much as possible, and that without fatigue. The disease being one of debility, there is but little strength left; and much exercise, often any active exercise, is prejudicial, disordering the digestive function and impairing nutrition. To enable this hygienic treatment to be carried out, and to avoid the moist cold weather of our winters, so unfavourable to the inflammatory affections which accompany the deposit and softening of tubercular matter, if the means of the patients admit of it they should be sent to a dry, cool, bracing, sunny climate, such as that of the sheltered north shore of the Mediterranean in the Gulf of Genoa, and not to warm, moist, relaxing climates like those to which consumptive patients were formerly sent under different doctrinal ideas. Although no medicinal substance can renovate, renew, exhausted vitality—although there is no panacea for such a disease—yet much may be done medicinally to restore healthy functional action, and to improve constitutional conditions. Thus, iron, phosphorus, acids, alkalies, bitters, etc., all find their application;

but only as adjuvants to hygiene and climate. They are merely like manure given to plants. A shrub dying in a city square from foul air, smoke, defective drainage, is doctored in vain with guano, bone-dust, etc., while it remains in the site unfavourable to its vitality. Transferred to the country, in pure air and good soil, these same agents may much contribute to its recovery. The inflammatory accidents which accompany phthisis—bronchitis, pleurisy, pneumonia—are mere phenomena, and only require secondary attention, although important in themselves, and destined perhaps to be the eventual cause of death. But, if the diathesis continue, they continue, whatever is done. If the diathesis can be modified, changed, organic vitality renovated, they stop and get well of themselves. Under the combined influence of sthenic treatment, aided by climate, hygiene, and medicine, the author has seen many cases of arrest and cure, since he himself has been a consumptive observer, and now looks upon the disease in its early stages as much more manageable than he formerly thought it and found it when actively engaged in large city practice.—*The British Medical Journal*.

TREATMENT OF QUINSY SORE THROAT.

The London *Lancet* publishes an interesting report of the treatment of tonsillitis adopted by physicians at the several metropolitan hospitals, from which we make a few extracts.

Dr. Anstie (Westminster Hospital) believes that in the suppurative variety two remedies only are of real value. If the case be seen early—i. e., within forty-eight hours of the occurrence of decided pain, before the swelling has become definite in form, and more especially if there has been no shivering and the febrile action is but slight, the application of strong local astringents is almost certainly curative. The rough way of using this treatment is to order the patient to gargle every half-hour with a solution of alum. A more precise and effective use of the same astringent can be made by throwing such a solution, in the pulverized form, against the affected part. Another effective mode of local astringency is the application of tincture of sesquichloride of iron on a sponge carried by a whalebone, which may be firmly pressed against the part. The other remedy besides local astringency is the use, in suitable cases, of purgative medicine. If (and only in this case) there is reason to think the bowels are loaded, a brisk purge of any kind which does not produce exhausting serous exhalation will frequently give great and speedy relief.

If the disease has plainly gone on to the formation of pus, the above remedies are useless, and will only worry the patient. Our attention

should then be directed, Dr. Anstie believes, to soothe pain and to keep the swelling within bounds, while we also support the patient's strength. Hot fomentations and poultices should be applied around the throat, the patient should gently inhale the steam of boiling water, and he should be given strong beef-tea and small quantities of wine or brandy every four hours. In nine cases out of ten, the pus may be left to find a natural opening, and only the occurrence of serious mechanical dyspnoea, or the appearance of a tendency to the spreading of the suppuration, should induce us to use the lancet.

Dr. Wilson Fox (University College Hospital) treats ordinary cases of tonsillitis which present themselves within the first forty-eight hours of the invasion of the disease with a brisk mercurial cathartic, followed by a saline aperient draught. In cases which have even run a course of three or four days, the same plan is found by him to be beneficial, if the bowels have not been previously acted upon. Even in the early stages, unless the use of gargles gives much pain, he employs the following formula for this purpose:—Chlorate of potash, three drachms; nitrate of potash, half an ounce; glycerine, half an ounce; water, eight ounces. When seen early, this course is, in his experience, almost invariably sufficient to cut short the disease in a few days' time; and he scarcely recollects an instance where it has been adopted in which abscess has ensued. In cases of very severe swelling, he has occasionally found scarification useful; but he regards these as quite exceptional. If ulceration supervenes, either upon the tonsils or on the fauces, the solution of the nitrate of silver, of the strength of fifteen grains to the ounce, is, in his opinion, the best remedy; and it may be advantageously applied to the tonsils, when suppuration is not present, in cases where the swelling lasts longer than five or six days. Dr. Fox strongly deprecates the use of the solid nitrate of silver in the early stages of the disease.

Dr. Clapton (St. Thomas's Hospital) recommends the usual depletory remedies, but objects to stimulating gargles in the early stages. When a patient has been the subject of repeated attacks of acute quinsy ending in suppuration, the plan of applying a liniment of thin extract of belladonna just below and behind the ramus of the jaw has been found a most excellent one, rapidly relieving the pain and intense irritation, and in some instances cutting short the progress of the disease almost at once.

In incipient sore-throat, of whatever kind, Dr. Broadbent (St. Mary's Hospital) has for some time given small fragments of guaiacum resin—a piece to be kept in the mouth till dissolved, three or four times a day. The good effects have been very evident, more particularly in superficial inflammation of the mucous membrane; but tonsillitis has apparently

been arrested, and in patients subject to quinsy, attacks have been averted.

Dr. Headland (Charing-Cross Hospital) relies greatly upon chlorate of potash as a gargle, and mild magnesian purges. None of the physicians think it necessary, except in extreme cases, to use the lancet.—*Medical Record.*

A SET OF FALSE TEETH SWALLOWED AND PASSED THROUGH THE BOWELS.

BY THOMAS GALT, M. D.

A few weeks ago, I was summoned in haste to see Mr. W., a respectable resident of this city, and found him much agitated, and suffering acute pain in the stomach. He is subject to epileptic fits, and stated, that on the previous evening, just before retiring for the night, he had an attack, which lasted ten minutes. After recovering, he suffered considerable pain in the throat, which was soon transferred to the chest, and then to the stomach, where it still continued. He did not feel alarmed until in the morning, when, on search being made for his *false teeth*, they could not be found, and he had now become convinced, that while in the fit, he had swallowed them.

The teeth, seven in number, four on the right, and three on the left of the incisors, (which latter were sound and in their places,) were on a gold plate, extending almost entirely around the upper jaw, and were kept in position by means of clasps embracing a molar on each side. These clasps, extending only about three-quarters around the two teeth, were of course open, presenting tolerably sharp prongs at each extremity of the plate, rendering them liable to catch and effect a lodgment in the intestines.

These statements being corroborated by his family, I concluded he had swallowed the teeth and recommended a course of mild cathartics; meantime to abstain from solid food, and drink abundantly of soups, broths, and slippery-elm water.

I heard nothing more from the patient for several weeks, when being called to see another member of the family, I learned, that about a week after my former visit, he had passed the plate and teeth entire, and was now wearing them. The trip through the *primæ viæ* not having changed their form, or impaired their form, or impaired their usefulness.

He stated, that as the plate advanced, he suffered severe pain at different points in his bowels; and that on such occasions, he would lie down, change his position, and manipulate the abdomen until the pain ceased.

I send you this statement of the case, thinking it might interest some of your readers, and as showing how formidable an obstacle may be received into the stomach, without producing any serious disturbance. *Philadelphia Medical and Surgical Reporter.*

HEMATEMESIS IN A CHILD AGED THREE YEARS AND TEN MONTHS.

Hæmatemesis is of such rare occurrence in young children, that the following case, for the particulars of which we have to thank Mr. Sydney C. Austin, deserves, we think, to be placed on record. The child had been so very ill-fed, that his blood had become considerably impoverished, and a scorbutic diathesis had been engendered, to which Dr. Sieveking was inclined to ascribe the hemorrhage.

Charles Dickenson, aged 3 years and ten months, was admitted into St. Mary's Hospital on June 15th, 1867. His mother stated that he had diarrhoea for a fortnight, and passed blood in the motions until the 11th of June. The child was excessively weak; and, as she was very poor, she could not get nourishment for him—in fact, she and her children had been half-starved for some time. On June 12th, after taking some tea, he was very sick, and vomited about an ounce of dark blood. The vomiting continuing after every meal, she brought him to the hospital.

Soon after his admission he vomited a small quantity of bright blood. He was very much emaciated, and very restless. Pulse 110. The tongue was coated with a dark red stain in the centre of the dorsum, which disappeared in a few days. A mixture was ordered to be taken every four hours, containing ten minims of dilute sulphuric acid, with a drachm of syrup, and three drachms of pimento water. He was directed to have simple diet, with isinglass-jelly, iced milk and broth.

June 16. He was better to day. He still vomited after both liquid and solid food. The quantity of blood was very small. There was pain on pressure over the epigastrium. The child did not sleep, crying a good deal. Two minims of tincture of opium were added to each dose of the mixture.

17th. He slept well in the night. He brought up about six drachms of dark blood this morning after breakfast. The tenderness over the epigastrium was increased. Pulse 114.

18th. There was less tenderness on pressure. He still had vomiting; but the quantity of blood was very small.

19th. There was no pain in the epigastrium. There was vomiting still; but no blood at all to-day.

20th. He was much better; more cheerful. He kept his breakfast down, and only vomited once during the day—no blood. Pulse 108. The acid mixture was discontinued, and a powder of a grain of tannic acid and five grains of sugar ordered to be taken three times a day; he was ordered one drachm of cod-liver oil three times a day.

21st. There was no vomiting to-day. He asked for more food.

23rd. The powder was continued. Half ordinary diet was ordered. He had no sickness.

26th. He went out quite well, having gained flesh considerably.—
British Med. Journal.

ON CARBOLIC ACID AS A GARGLE IN DIPHTHERIA.

Charles Sedgwick, Esq., Hollingbourn, Maidstone, England, in a communication to the *Medical Times and Gazette*, on carbolic acid in diphtheria, says:

I usually give it in the form of a gargle, but in children, by swabbing the throat out freely with it on a piece of sponge. When the disease has been taken early, I have not failed in a single case, but have lost some where it had gone too far for medical treatment to be for any service, Carbolic acid has a decided effect upon the false membrane thrown out. The following is the form I usually prescribe: ℞. Acidi carbolici, Mxx; Acidi acetici, f. ʒ ss; Mellis, ʒ ij; Tinct. myrrhæ, f. ʒ ij; Aquæ, q. s. M.

Ut fiat gargarissima, f. ʒ vj.

The carbolic and acetic acids to be well shaken together, the mel. to be added with the aquæ gradually. With it I usually give tinct. ferri and quinine.

QUININE IN THE TREATMENT OF CROUP.

Dr. D. W. Williams, of Liverpool, communicates the following to the *British Medical Journal* on the use of quinine in croup.

In 1862, I examined the tracheæ of three children who died of croup, and found the mucous membrane covered with a yellowish white substance like gruel (muco-puriform matter), the membrane itself been reddened. A crow-quill could have been passed down the tube without touching the substance which lined its walls. There was nothing like blocking, nothing like tubes of false membranes (lymph), yet my little patient died of slow suffocation.

While thinking of these cases, one of my own children took croup. The usually remedies were adopted; but in a few hours the result could be but too easily foretold; she was slowly choking. The restlessness and anxiety so well known was great; and I asked myself these questions:—“Is this child dying from inflammation and blocking of the trachea, or from a blood-poison, which manifests itself in local inflammation and spasm?” Inclining to the latter opinion, I gave her a grain of quinine, a large dose for a child twelve months old. In twenty minutes, the relief was surprising; the restlessness, etc., abated. In an hour, a second grain was given, and the child fell asleep, and made an excellent recovery—the quinine being continued in smaller doses. Since this, I have treated several cases in the same way, with similar result. In bronchitis and pneumonia also I find quinine of great value when this distress is out of proportion to the amount of disease.

Midwifery and Diseases of Women and Children.

CHLOROFORM IN MIDWIFERY.

At a meeting of the Obstetrical Section of the British Medical Association the following conversation took place, which I jot down from memory, thinking that the publication of it will prove instructive and useful to many of my country brethren.

Sir James Simpson, having consented to answer any questions put to him on the subject of the administration of chloroform, commenced by stating that at the present time nearly every woman in Edinburgh was delivered under the use of chloroform, and so few bad results had occurred that he could not now refuse to any case the boon provided by science for the relief of suffering humanity. He was then asked how he used it. He replied that every one had their own favourite method; a very general way was by spreading a thin towel loosely over the face and dropping the chloroform on it. For his part, he used a napkin, folded up as a cylinder, dropped the chloroform on the interior, and admitting more or less air by opening or closing the end of the cylinder remote from the mouth; he always rubbed a little fine oil over the skin of the face, to preserve it from the irritation produced by the vapour of the chloroform.

Question.—Have you known it to produce convulsions?

Answer.—When I first used it I was rather afraid of this result. But, in the first place, I never met this occurrence; and secondly, I soon

found that Dr. ———, of Glasgow, introduced it as a remedy for this very affection, and its use in such cases has gradually extended. My experience would lead me rather to look on it as a prevention than a provocation to the occurrence of convulsions, and naturally so when we consider how much of the tendency to convulsion depends on the nervous excitement and irritation of unrelieved labour.

Question.—What about puerperal mania?

Answer.—I cannot recall any case having occurred where it had been used, but I will tell you a curious circumstance, knowing how extensively it is used in Edinburgh. I visited the great Lunatic Asylum of the City of Morningside, and on enquiring, found that there were eleven cases of puerperal mania under treatment. I traced out the history of each case, and found that not one of them had been confined under the use of chloroform. Duncan and Flockhart, the chemists in Edinburgh, prepare 1400 doses of chloroform daily, now, if as many doses of salts were distributed, we would have had as many untoward events from diarrhoea as we have had from chloroform. It should be always given in the recumbent position, as most of the deaths that have followed the use of chloroform occurred in trifling cases where it was given in the upright position.

Question.—Is there any means whereby we can distinguish chloroform that is unfit for use?

Answer.—Not that I know of. It is the best way to go to the best shop.

Question.—But if the best shop is eighty miles away?

Answer.—It keeps very well for a long time, several months. (Here Macnamara stated that good chloroform should smell sweet and free from acid, and if dropped on the hands should leave no smell after a few minutes.)

Question.—When do you begin to give it?

Answer.—Well, I can't exactly tell you. A good rule is whenever the patient begins to weary of pain. She should be allowed to inhale it only when in pain, and not during the intervals.

Question.—Have you found it promote hæmorrhage?

Answer.—I have not. The moment the head is born you should sweep away the towel and use the chloroform no longer. If you adopt the plan I do, I believe it is an old Dublin plan, of following down the contraction of the uterus with the hand while the child and placenta are being expelled, and holding your hand for some time on the contracted uterus, I believe you will not meet more cases of hæmorrhage with the use of chloroform than without it. (Here Dr. Beatty entered the room,

and bearing testimony to the great advantages he had found in its use, being one of the first who used it extensively in Ireland; yet, he thought that he was satisfied that its use did, in some measure, predispose to hæmorrhage, and that, therefore, about the close of every case in which he used it he gave a dose of ergot).

Question.—Does it delay labour?

Answer.—No, on the contrary. I think I have often saved much time by its use.

Here Dr. Macnamara bore strong testimony to the great value of chloroform generally, and eulogized it as a boon of mercy to mankind, and stated that it appeared to him that the more wretched the sufferer the greater the need for its use.

Question.—Are there any particular symptoms indicating that chloroform is taking effect, so as to guide one how far they should go with it?

Answer.—Nothing particular.

A gentleman here asked Dr. Macnamara if he had ever observed a tendency to spit or expectorate when the chloroform was taking effect. Dr. Macnamara said such was the case, but his remarks were rendered inaudible by a movement to break up.

Sir James Simpson stated strongly that he never had heard indecent language from patients taking it, in which he was supported by Dr. Macnamara, but persons who understood foreign languages often used them.
—*Medical Press and Circular.*

Materia Medica and Chemistry.

NITRATE OF POTASH IN THE CURE OF INTERMITTENT FEVER.

Dr. Sawyer, of Illinois, states that he has used this salt with great success in the cure of intermittent fever, even where quinine has failed. He administers it in ten grain doses, with $\frac{3}{4}$ ss. of brandy or water: or if more agreeable to the patient, the powder may be placed on the tongue and allowed slowly to dissolve. He says "I deem it a specific in ague, and have never failed to arrest the paroxysm, if uncomplicated. You will also find that the patients are less liable to relapse than when cured by quinine. In the cold stage, if administered in a full dose, and the patient be placed in bed and covered with blankets, he will in a few minutes experience considerable heat, which will be followed by copious perspiration, and every unpleasant feeling will vanish." The action of this medicine more closely resembles nature's mode of curing the disease in ques-

tion than any other plan, as she cures by copious diaphoresis; or, in other words, by elimination.—*St. Louis Medical & Surgical Journal*.

MODE OF ADMINISTERING CHLOROFORM INTERNALLY.

The best vehicle for the administration of chloroform is milk. Those who have used it state that nothing more acceptable can be desired by either patient or physician. — *Richmond Medical Journal*, June, 1867.

CURARE IN EPILEPSY.

Dr. Benedikt informs the Vienna Medical Society that the subcutaneous injection of curare has a favorable influence over epileptic diseases. A man 20 years of age had had epilepsy since he was 9 years old. During five months he was subjected to curare injections in hospital. For the last fifteen months he has had no return of the fits. Four similar cases, equally successful, were related by Dr. B. The injections were used three times a week under the skin in the neck, an eighth of a grain of commercial curare being used at each operation.—*British Med. Journal*, June 30, 1866.

Professor Depaul remarks that while abundant attention is given in obstetric treatises to the treatment of healthy new-born infants, and those who are seemingly still-born, little space is devoted to the care of weakly. This want he endeavors in part to supply. He thinks that authors have not laid sufficient stress on certain deceptive appearances, which seem to imply that the infant is out of danger because it takes the breast, and seems to suck.

A new Anæsthetic has been introduced into London, within the last few months, called the "Ter-Chloride of Carbon." It has been given in many instances, and found to act well. We will notice it more fully in the next number of the Journal.

Canada Medical Journal.

MONTREAL, SEPTEMBER, 1867.

THE APPROACHING MEDICAL CONVENTION AT QUEBEC.

The first of the resolutions about to be submitted at the approaching Convention for the consideration of the profession of Canada, is the following: "That in the interest of the public, and the Medical Profession, it is desirable to adopt such means as will insure an uniform system of granting license to practise Medicine, Surgery, and Midwifery, throughout the Dominion of Canada." This, as we before remarked, is in every way desirable, but we regret to observe a proposal to interfere with the established rights and privileges of the Universities and Colleges.

Is it presumed that a test examination before members of any profession, who are unconnected with the schools, who have no interests at stake, would be a more just, equitable, and at the same time a more perfect, examination than one passed before the faculties of the Universities? We maintain without fear of contradiction, that the Universities have well performed their work. It is in every way their interest to elevate the status of their particular school; the examinations are watched over by each and every graduate, who has an interest in keeping up the standard of his college. Every incompetent man permitted to pass by the faculties depreciates just so much the value of the diploma or degree of each individual graduate who preceded him. This is well known by all graduates, and if, as is inferred by the ungracious attempt to deprive the Universities of their vested rights, any faculty of any University, were to pass unqualified men, the alumni of that University have the power and would exercise it, of sending representatives to their corporation boards, or to their convocations, and would outvote the faculties and prevent the giving away or "sale of degrees" a charge made some years since against the Faculty of Medicine, McGill University, by no less a person than Dr. Dickson, who then held the position of president of the

Medical Council of Canada West. The actions of men with little minds are more amusing than hurtful, and this snarl of the mouth-piece of the Upper Canada Medical Council was hardly worth a passing comment.

The General Council of Medical Education and Registration of Great Britain, is composed of representatives of each of the Universities and Colleges in England, Scotland and Ireland, and also of a certain number from each section of the kingdom, nominated by her Majesty, with the advice of her Privy Council. This body exercises a general supervision, they recommend to the Educational Institutions, certain changes which may be deemed necessary or advisable, both in the status of preliminary education and in that of the professions of Medicine, Surgery and Midwifery, but the vested rights or privileges of the schools are not interfered with. The Council, however, possesses the power of suspending from registration privileges any Institution which does not conform to the laws enacted by that body, as bearing on educational status. As a result, a high order of general education will be necessary and will become uniform throughout Great Britain.

It appears to us that a similar Law adapted to our country is what we require; a bill based on the amended Imperial act, and submitted to the Legislature of each Province. It is much to be regretted that the higher grades of educational progress are not under the supervision and care of the Commons of Canada. It is all very well in its way in a country like Canada in which the people are divided by Religious, Doctrine to give to each section the right of educating their young in their own peculiar tenets, but in the higher branches of education, more especially the professions of Law and Medicine, wherein no doctrinal points are raised, we do think it would have been wiser to have left them specially to the General Legislature, as in the case under discussion it is unquestionably a difficulty which will not be overcome, and we feel convinced that uniformity in system is a thing not to be looked for or expected.

There is one clause in the amended Medical Act of Great Britain which we copy.

“PENALTY FOR THE ASSUMPTION OF TITLES, &C., BY UNREGISTERED PERSONS PRACTISING MEDICINE OR SURGERY.—If any person practising medicine or surgery, or engaged in the cure or treatment of diseases or injuries, not being registered under the Medical Acts, takes or uses any of the designations enumerated in Schedule (A) to the Medical Act (1858,) as amended by this Act, or by any other of the Medical Acts, or the designation of Physician, Surgeon, Doctor, or Apothecary, or any other designation used by or used to distinguish duly qualified prac-

tioners of medicine or surgery, or any class thereof, or the designation of Professor of Medicine or of Professor of Surgery, he shall for every such offence be liable on summary conviction to a penalty not exceeding twenty pounds."

The law under which the profession in Canada is governed is very defective, and is no terror to wrong doers. It is indefinite and inoperative; a conviction under the law as it stands for practising Medicine, Surgery or Midwifery without a license, is next to an impossibility; as a result we have throughout our country, but more especially in the larger cities, all sorts of quacks: Thompsonians, Steam Doctors, Bone Setters, Eclectics, Homœopaths, Tumbleties, Electricians, Vacuo Vacuas, (a novel genus,) Phrenological itinerant lecturers, and every shade and degree of wonder monger all clamoring for public favour and public support. It is with a view of remedying this condition of things that the proposal has been made to endeavour, if possible, to secure an uniform system of granting license to practise in the Dominion.

It must be borne in mind that this does not apply to persons who have submitted to examination before any of the several examining boards. The question of want of efficiency on the part of the Universities is not mooted; they have not habitually passed unqualified persons; the examinations of these several bodies is of a higher grade than that hitherto exacted by the authorized licensing boards in the Upper and Lower Provinces of Canada. We cannot see the utility of seeking to deprive the Universities of time honoured customs and privileges which they have held and exercised with credit and faithfulness, and by which the very character of our educational system has been elevated. It is a matter of proud satisfaction to us, as Canadians, that the Universities of McGill College, Montreal, Queen's College, Kingston, University College, Toronto, and Victoria College, Cobourg, are recognised by the colleges of the Mother country, and their certificates admitted on a par with those received from any of the educational institutions of Great Britain. Why then should we seek to degrade our own institutions. We doubt much the power of the Legislature to abrogate those privileges but admitting their power to take away those rights, would it be expedient? Is it right to reduce our condition to a state of educational chaos? What we do require is a board or Council of general supervision to act as a check on all our institutions, to insist on a regular system of preliminary education and also to supervise the method of teaching and examination, but, not to interfere with what is working well, and with what has hitherto elevated the status of our graduates. Furthermore, what we require is a board having the power of arresting quackery and humbug, and driving it

from our borders. This can, in our opinion, be best secured by a General Council of Medical Education and Registration having all the powers and authority in Canada which is held by the Medical Council in Great Britain.

MEDICAL NEWS.

DEATH OF PROFESSOR VELPEAU.

The Paris Faculty of medicine has been deprived of one of its most eminent members. Professor Velpeau breathed his last on Saturday, the 24th inst.

Velpeau was born in 1795, and was the son of a country blacksmith, and in his early years plied his father's trade. He received no higher education than what was usual in his station of life. When a lad of fifteen he was admitted for some slight disorder as an indoor patient at the Hospital of Tours. This trifling circumstance had a decisive influence upon his whole career. During his convalescence he acted as a servant in the wards of the Hospital. The quickness of his intelligence, and the interest which he seemed to take in everything connected with Medicine, attracted the attention of Bretonneau, under whose care he was placed. "Would you like to be a Doctor?" said he one day to this clever lad. "Of course I should," was the reply. Young Velpeau was sent to school at Bretonneau's expense, and, without ever becoming a first-rate classical scholar, soon acquired enough Latin to pass the examination which it was indispensable to get through before commencing his Medical studies.

He entered that Hospital as a student which he had formerly entered as a patient, and soon took his degree as an *officier de santé*.(a) He then paid a short visit to Paris, to see the great city before settling in practice in his own native place. But when he beheld the immense advantages which Paris held out to all those who wish to acquire instruction, a change came over his spirit. He gave up all idea of ever returning home; and, in spite of poverty—in spite of neglect—he began to work his way up. He gave lectures on anatomy, got a few pupils, and managed, by strenuous exertion, to keep body and soul together. His first great success was his nomination to the Prosectorate of the Faculty, which enabled him to improve his anatomical knowledge and establish his position as a rising man. The generous patronage of Profession Cloquet

greatly helped him on at this time. He rapidly obtained his Doctor's degree, and became successively Surgeon to the Hospitals, and Assistant-Professor at the Faculty of Medicine.

In 1830, the Professorship being thrown open to competition, Velpeau at once entered the lists. He went in five times before succeeding, and each time he produced a book on the subject taught in the chair for which he was a candidate. At last, in 1835, he was appointed to the chair of Clinical Surgery and entered the Charité, in which he continued to lecture till he took to his bed, never to rise again.

The disease under which Velpeau had been suffering of late was an enlargement of the prostate. He had only been confined to this bed for a few days when he was seized with pneumonia, which speedily proved fatal. His last words were, "*il faut toujours travailler, mes amis.*"

Among the causes of death given in the June report of the Lowell, Mass., city physician, was "Homœopathic foolery."

Forty years ago surgeons and doctors generally officiated as teeth-pullers whenever occasion demanded. In 1820 there were but thirty practising dentists in the United States. In 1850 the number had increased to 2,923, and at present there are about 5,000 regular dentists.

Nitrate of silver stains may be removed from the hands or clothing by the combination of tincture of iodine and a solution of hyposulphite of soda.

LOBELIA IN ASTHMA.

The *Lobelia inflata*, a drug much praised and abused by quacks and somewhat slighted by the profession, is in constant use among the out-patients of the City Hospital, for diseases of the chest. In doses of ten minims, three times in the day, it appears frequently to produce the most admirable effects in cases of chronic bronchitis, complicated with a tendency to paroxysmal asthma. It is commonly given in conjunction with sedatives, expectorants, or stomachics, often agreeing remarkably well with the latter. Patients taking it frequently complain of much nausea and sense of depression during the half hour or so following each dose, but it seems on the whole to decidedly improve the appetite and digestion. If the nausea be excessive, combination with a few drops of dilute hydrocyanic acid is often useful. — *Medical Times & Gazette.*