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VOL. 1.]

MONTREAL, JANUARY, 1846.

[No. 10.

ON INDIAN DISEASES AND REMEDIES.

With a return of sick treated at the Indian establishment Great Manitoulin Island, Lake Huron, in 1841-2.

By WILLIAM WINDER, M. D., Montreal.

(For the British American Journal Medical & Physical Science.)

There having appeared in a former number of this Journal, a paper on the diseases of the slaves of the Southern States, it occurred to me, that something of the same kind on those of the Aborigines of this continent might prove worthy of attention; and Dr. Darling, the medical officer of the Indian department, at the Manatouawning Islands, on Lake Huron, having kindly favoured me with a copy of his sick report, at that station, for the year 1842, with some excellent remarks on particular cases, I have ventured to think they will be found not altogether unworthy of notice.

To the following report and remarks, I shall take the liberty of adding some observations on the indigenous remedies of the Indians, and their own mode of treating the diseases to which they are particularly liable.

Return of Sick treated at the Indian Establishment, Manatouawning, Wequanrekong, &c., Gt. Manitoulin Island, Lake Huron, from 16th August, 1841, (date of last Return,) to 31st December, 1842.

Disease.	No	Disease.	No.
Teeth extracted,	68	Simple fever,	14
Lientery,	2	Concussion of Brain, with Paralysis,	2
Gall Stones,	1	Do. of do., with wound	1
Diarrhea,	42	Difficult Dentition,	28
Dysentery,	46	Ulcerated Throat,	3
Ophthalmia, acute and chronic,	32	D. uria,	2
Inflammation of Windpipe	1	Paralysis,	1
Do. of Mucous Membrane of Lungs,	4	Worms,	21
Do. do., chronic,	19	Hypochondriasis (a White)	1
Wasting,	6	Difficult Labour, Indian,	1
Vomiting,	16	Aneurism by Anastomosis,	1
Inflammation of Liver,	2	Ophthalmia Jarsi, &c.	13
Do. of Brain,	2	Diseased Knee,	4
Do. of Breast,	4	Do. Shoulder,	1
Do. of Lungs,	3	Do. Hip,	2
Do. of Throat,	28	Do. Spine,	4
Rheumatism, chronic,	40	Ulcers,	10
Do. acute,	3	Epilepsy,	10
Colic,	12	Menorrhagia,	1
Boils,	8	Porrigo,	13
Amenorrhœa,	4	Catarrah,	50
Neuralgia,	4	Erysipelas,	1
Gonorrhœa,	14	Burns, 1 fatal,	7
Sciatica,	5	Dysmenorrhœa,	1
Abscess,	11	Pleurodynia,	3
Abscess of Lumb. r.,	1	Debility,	1
Abscess of Breast,	2	Bloody Urine,	1
Do. of Vagina,	1	Retention of Urine, (fatal.)	1
		Procidencia Uteri,	1

Disease.	No.	Disease.	No.
(Childbirth (Whites),	3	Lumbago,	6
Weed,	1	Amentia,	1
Contusion,	23	Loss of Voice,	1
Dropsy of Head, and Spina Bifida,	1	Periostitis,	1
Do. of Head,	2	Menorrhagia,	1
Do. of Abdomen,	1	Hooping Cough, no account kept.	
Earache,	14	Gravel,	1
Whitlo,	2	Dyspepsia,	6
Nœvus and inflamed Labia Vag.,	1	Constipation,	28
Bleeding from Lungs,	5	Ague,	6
Psoriasis,	1	Wounds,	19
Tape Worm,	2	Do. of Chest,	3
Exostosis of Fingers,	1	Do. do., Fistulous,	1
Threatened Apoplexy,	2	Do. of Scrotum,	1
Sprains,	2	Pleurisy,	7
		Consumption,	12

Total, 733; exclusive of cases occurring during the Issue of Presents; and the usual run of "Castor Oil" and "Black Draught" cases.

DANL. DARLING, L.M.,
Surgeon, Indian Department.

Manatouawning, 31st December, 1842.

REMARKS.

Toothache.—Creosote generally affords temporary relief, but the majority return for extraction. Acute Rheumatism is rare, but one of the cases was exquisitely marked. The chronic form is exceedingly common, and always benefited by stimulating remedies. Neuralgia, in various degrees of severity, is far from infrequent here, often in its highest degree.—Tic, almost always periodic; Arsenic more useful than Quinine. Abscess of Vagina occurred in an elderly White woman; sufferings were severe. Her mingled stupidity and modesty prevented an early discovery of their cause. A touch of the abscess lancet set all to rights. Dropsy of the Head, and Spina Bifida, a half-breed child. Some relief obtained from a seton; case hopeless, and its death to be desired; it, however, still lives. Dropsy of Abdomen, a very rare disease among Indians, the subject an otherwise healthy woman. Complaint removed by the usual remedies, very much to the surprise of herself and friends, who were puzzled to know where the water went to. Ague.—Five of these cases occurred in Indians at various periods after their return from Detroit. They were all speedily cured by Quinine, &c., (of which they have a very high opinion,) aided by the purity of the air of the Island, where no miasm can exist productive of ague, though there is certainly some peculiarity in its atmosphere to which I am inclined to attribute the number of Neuralgic cases. The sixth case of ague was the servant of the Commissariat Officer, of great severity; cold stage lasted three hours. Contracted the disease at Amherstburgh some years ago. Bled in the cold stage, took Quinine and Solut. Arsenicalis combined. Had no return for twelve days, when he left the Island. Wound of Chest.—Fistulous, the result of a stab in a drunken fray, received five months ago. Under the right shoulder-blade is a wound capable of admitting the little finger, and constantly discharging a large quantity of healthy-looking matter, but no air. The wound was inflicted by a large butcher's knife; an immense gush of blood took place on the instant, he fainted, and continued alternately fainting and the wound pouring forth blood for three days, when it ceased. When seen, he was suffering from hectic fever. He was supplied with good food, and every thing done the nature of the case suggested. At the end of two weeks (when he left the Island, being only a visiting Indian), confident hopes were entertained of his restora-

tion to health. Hypochondriasis.—A White woman, appears to have been caused by the shock she received from a friend of hers, in an adjoining house, committing suicide under appalling circumstances. Sent to her friends for change of scene, &c. Diseased Joints.—Almost always treated by rest, starched bandage, caustic issues, and a firm roller, and some preparation of Iodine internally. Retention of Urine.—Nothing tickles the fancy of both patient and spectator more than the introduction of the catheter. The sight, however, of a large-sized one rather alarms. Hooping Cough.—No note of these cases, as they are generally mild, seldom requiring more than an occasional emetic, and a flannel shirt, if it can be obtained. Neither has the number of deaths been given, as it is impossible to procure a correct one; to give those, therefore, of which I have cognizance, would cause such a ridiculous disproportion between the number of cases of disease and the number of deaths, as to lead to the conclusion, either that the practice adopted was unusually successful, or the cases either not what they are denominated, or uncommonly slight in degree. "I suppose you find very little disease amongst the Indian tribes?" is a question which has been put to me over and over again by highly intelligent men, who appear, oddly enough, to suppose that the absence of every thing which they themselves consider as absolutely necessary to existence—shelter, comfortable clothing, proper and sufficient food, &c.—must ensure to the Indian an immunity from disease and death. From that cause, very few of the human race die of mere old age. Common politeness, or the fear of a broken head, prevent your doubting the sanity of the inquirer, and few men would feel it their duty to suggest to his friends the propriety of a Commission de Lunatico Inquirendo. It is better to assume a moralizing strain, to recall to his recollection that man is born to die, as the sparks fly upward; to point out that in a body of five or six thousand Indians assembled, very, very few old persons are to be seen; to take him to the Indian lodges, in almost every one of which some one has a complaint begun, continuing, or nearly ending; (as is the case in the dwelling of almost every White family in the land,) and to assure him that, before nightfall, you will have ample opportunity of proving that a dead Indian is not nearly as great a rarity as a dead ass is in Europe.

This Return cannot be more appropriately closed than by the following extract from a lately published work:—

"Another source of error is the reputed absence of indigence and disease in savage tribes. But a brief examination will show that this absence is more apparent than real, and that uniformity has been mistaken for perfection. It is generally agreed that indigence consists in the want of some things absolutely necessary for existence. Such a state cannot exist in barbarous life. The savage either lives or dies: he is never precisely rich, or poor: whilst the means of subsistence are afforded, he exists from hand to mouth; when they fail, there is no one from whom he can beg or borrow, and few whom he can plunder. With him destitution is death. It is true he can support hunger, thirst, pain, to a degree we cannot approach; that he can feed on substances from which we shrink with horror. But there are limits to his powers of endurance. When these are passed, he sinks unnoticed and unknown. There is no one to record that a unit has been subtracted from the amount of human existence. The uniformity which travellers and voyagers have discovered in savage life, is a condition but one degree higher than actual starvation. Those who sink below it, disappear instantaneously, and are as if they had never been. For a similar reason, severe diseases are rarely seen by casual visitors of savage tribes. Death is their doctor, and the grave their hospital. Those who have resided among them, testify that diseases are produced by the privations endured at one period, and the repletion in which they indulge when a period of plenty arrives. But unless the cure is rapid, the termination of the disease must be fatal. When patients are left entirely to Nature, it is found that Nature presses very hard for an immediate payment of her debt."

Although the Indians, being without the advantages of science to guide them in their choice of remedies, and treatment of diseases, derive their principles from mere experience, it is certain, that we are indebted to their *Materia Medica* for many valuable articles of a vegetable kind; it is as certain that they are frequently successful in their adaptation of these to complaints of a formidable

character. One of the remedies in great use amongst them is the *Geranium Maculatum*, which many eminent physicians of the United States rank as one of the most powerful vegetable astringents, being principally composed of *tannin* and *gallic acid*. In the second stage of dysentery and diarrhoea, after evacuations; in hemorrhages of the alimentary canal; and as a styptic in external bleedings, it rarely fails of giving relief. Its dose is from gr. x. to ʒss. of the powder, or ʒss. to ʒj. of a decoction made with Rad. Geranii, ʒj, Aquæ ferventis lb. ss. With the Indians it is a favourite external styptic, the dried root being powdered and placed on the mouth of the bleeding vessel. It is also much used by them as a wash in Leucorrhœa. Internally, in doses of half a teaspoonful in cold water, they consider it very efficacious in hæmoptysis, and in this opinion, they are fully sustained by Thacker, Mease, Bigelow, and others.

The *Xanthoxylum Fraxineum*, or Prickly Ash, is one of the most valuable remedies of the Indians for the cure of rheumatism. It is said to resemble guaiacum in its properties, and is much used by the Americans as a remedy in chronic rheumatic complaints, and particularly in cases of a syphilitic taint. Bigelow says he gave the bark of this shrub in doses of ten and twenty grains with great advantage.

An excellent tonic is the *Xanthoriza Apifolia*, its composition being principally *resin* and *gum*, and the taste intensely bitter. The dose is ʒij. of the powdered root. The Indians administer it as a diuretic in dropsy, and also use a cold watery infusion for sore eyes.

A favourite and well known remedy with the Aborigines is the *Eupatorium Perfoliatum*, having the familiar names in the United States, of Boneset, Crowwort, Thoroughwort, &c. Its taste is intensely bitter, with a slight astringency, but no acrimony, and its operation is tonic, sudorific, cathartic: according to the mode of its exhibition. It is given in cold infusion in intermittents, continued fevers, and inflammatory diseases, to produce vomiting and catharsis in hot infusion, and as a tonic in substance. In the United States Pharmacopœia, there is an official formula *Infusum Eupatorii*. The natives administer it with good effect in fever, and as a common drink in acute rheumatism, pouring a quart of boiling water on two drachms of the leaves, and drinking about three ounces three times in the day.

The *Cornus Florida*, Dog wood, is said to differ little in its chemical composition from the Peruvian Bark, and Dr. John Walker states, that of all the indigenous tonics, this is the most beneficial in intermittents. Thirty-five grains of Dog Wood Bark are said to be equal to thirty grains of cinchona. The Indians use a decoction of small branches and buds, in want of appetite, and debility of the stomach. It is valued also as a poultice to correct ill-conditioned sores.

The *Polygala Senega* is too well known to need description. It is much used by the Indians, who give it in cold infusion during the remission of fevers, attended with great prostration of strength, and in diseases of the pulmonary organs. They also esteem it highly in female complaints, and in this agree with Dr. Chapman, who considers it the most efficacious emmenagogue, and useful in all forms of amenorrhœa.

It is not a little remarkable, that among all the Indian tribes known to Europeans, the production of increased perspiration constitutes one of their principal remedies. A favourite and universal mode of procuring this is, the use of the vapour bath, and the construction of this is similar throughout the different nations of the North West. Mr. Cormack, in his account of his expedition to discover the aborigines of Newfoundland, or Red Indians, says, that he discovered, in a deserted village, the remains of a vapour bath. The method used to raise the steam was by pouring water on large stones made very hot. Over these a hemispherical frame-work, closely covered with skins, was placed to exclude the external air. The patient then crept in under the skins, with a birch rind bucket of water, and a small bark dish to pour the water on the stones, and thus enable him to produce the steam at pleasure. He remains as long as the heated rocks retain heat sufficient to raise the vapor, when he retires, wrapped in a robe or blanket, and goes to bed. The bath is principally used in rheumatism, dropsy, and the cold stage of fever. Warm sudorific infusions are taken in the bath, and the debility induced is sometimes so great that the patient faints, which, however, followed by proper treatment, generally has a beneficial effect.

I have said that the Indian is guided by experience in his treatment of disease. For example, when suffering from acidity of the stomach, he takes some of the absorbent earths that are found on the banks of the rivers. Bleeding in their inflammatory diseases is also much used. But the simple native of the forest does not employ the former from any knowledge he possesses of the principles of chemistry, nor the latter from any acquaintance with the laws of physiology. We, on the contrary, when a few grains of soda are taken to effect the same object, shew our learning, and sometimes our pedantry, by explaining that, as the soda contains an alkaline principle, the acidity of the stomach is neutralized by its administration, and a purgative salt being formed, in some measure, by the combination, the double purpose is thus effected of a corrective and an aperient; whilst the bleeding lessens the momentum of the circulation, and checks inflammatory action. Still the results are the same. The uncivilized man gropes his way in the dark, and though we are led by the light of the lamp of science, each attains his object by the same means. Their re-

medies must necessarily be simple in ordinary cases, consisting chiefly of warm infusions, powdered barks, roots, and leaves. A modern writer states, that in their febrile diseases, they make the state of the skin and bowels the guide by which to regulate their practice. When the skin is moist for a considerable time, and the thirst ceases, they say there is no danger. When the evacuations from the bowels become less offensive, and change their colour, the tongue becoming clean, they stop purging and diaphoresis. If there is great debility, they commence giving tonics, which are commonly bitters. Should these induce costiveness or a return of the fever, evacuants are again had recourse to. There is something so rational, and yet so simple, in all this, that I hardly think we should find anything to improve upon it in Sydenham, or Cullen; and, as the great Boerhaave tells us, that "simplicity is the seal of truth," probably here is as much practical, unsophisticated truth, as will be found in the elaborate treatises of ancient and modern professors.

That they are acquainted with the mode of relieving inward pains by treatment similar to the moxa, is seen by their burning a piece of touch-wood over the pained part, and suffering it to produce a blister. They are also aware of the advantage of relaxing the muscles in dislocations, for in cases where they do not succeed readily, they nauseate the patient to a most distressing degree, and then find very little difficulty in reducing the luxation. Tumors and abscesses are allowed to suppurate, generally, without any application to them. When much inflamed and painful, plasters of bruised herbs, or warm fomenting poultices are used. If matter forms, they make an incision for its escape, and continue the poultices to promote the discharge.

The subject of Indian diseases, and remedies, affords much matter interesting to the philosophical inquirer, particularly as to their mode of treating the more formidable complaints of Dropsy, Rheumatism, Syphilis, Pulmonary Consumption, and Asthma, in which they are sometimes very successful.

The space I have now occupied warns me to conclude for the present, but having received, through the kind attention of Mr. Vardon, chief clerk in the Indian Department, a copy of the Sick Report of the Indians, for the year 1844, I hope to make it the subject of a future communication, with some observations on the diseases abovementioned.

Montreal, December 29, 1845.

OBSERVATIONS ON SMALL-POX IN THE RURAL DISTRICTS OF CANADA EAST:

By A. VON IFFLAND, M.D.

One of the most destructive scourges in human so-

ciety, the *Small-Pox*; and against the infection of which, the experience of nearly half a century, throughout almost every corner of the inhabited world, has served to establish *vaccination*, as a security* and which, it had been calculated, the course of a few years would altogether annihilate, has, within two years (and particularly the present one), exerted its direful influence in several sections of Lower Canada, and been attended with the most calamitous consequences and destruction of human existence.

About thirty years since, large grants of money were provided by the Provincial Legislature, for the promulgation and extension of Vaccination throughout the Lower Province, but the hurried and imperfect manner in which its operation was effected, and the instructions of the Board (appointed to carry the provisions of the law into effect) executed, in several parishes, leave the inhabitants much room to doubt the efficient security to the vaccinated, against variolous infection, for hundreds of grown and aged persons have lately been attacked with the *Small-Pox*, which, in many cases, proved fatal from its confluent nature.

For several years back, Vaccination has also been intrusted to illiterate persons, totally ignorant of its characteristics, either by experience or from the description of others; and, I may also add, that several medical men have been extremely inattentive to those numerous constitutional and local peculiarities which weaken its preventive power and security against the existing disease. There are, however, several respectable practitioners who assert, that many who have been vaccinated, and who then appeared to have gone through all the characteristic stages of the *Vaccina*, have, some years subsequently, taken the *Small-Pox*. To these exceptions to the preventive power of the *Vaccine* disease, and *they are too many not to influence the minds of some with terror and annoyance, are we now unhappily indebted for the renewal of the Small-Pox-inoculation, the tendency of which has been, not only to spread and multiply the disease, but to afford a constant source of infection.*

The question (and it is a very important one) with several medical gentlemen, respectable from their long standing and experience, is, whether the

* We take occasion to differ from our Correspondent on the value to be attached to the act of vaccination. We think that it is commonly a modifier of the type of a subsequent attack of *Small-Pox*, by no means a preventative. As to the propriety of some Legislative interference in preventing *inoculation*, we heartily concur with Dr. Von Iffland. We have seen the most disastrous consequences attend the practice, putting entirely out of the question the fact that each inoculated case becomes itself, afterwards, the source of new infection. By a late Legislative enactment in Great Britain, a fine and imprisonment are the legal reward of every one who practises *inoculation*, and we have read of this penalty having been carried into effect in at least two instances. —Eds.

mode of transferring *independently* the lymph from one patient to another, does not induce some diminution in its specific properties, with a variation in the specific characters of the disease engendered by its use from the genuine type; and, from the facts already before them, they entertain the opinion, that the *Vaccina* should be repeated after a certain number of years. They are also strengthened in this opinion, from the important consideration, that, in several rural sections of the Province, the lymph communicated from one system to another, traces its origin to its first introduction among them, and which is no less than thirty years back!

My long experience has not failed to introduce to my observation many failures in the security of *Vaccina* against *Small-Pox*, and under circumstances which, at the time, produced such doubts upon my mind as were not dissimilar from those now entertained by my medical friends, but they were soon removed upon more mature consideration. It cannot be denied, that the lymph, though originally possessing the specific virus, may suffer a decomposition, either from putrefaction, or some less obvious cause, and produce a *spurious disease*, which, although bearing, in some instances, a striking resemblance to the genuine, may be detected by a very attentive and experienced Vaccinator. The failure as a preventative of *Vaccina* may also be ascribed to unknown peculiarities of the constitution, to intervening disorders, independent of the *Vaccina*, and to inflammation excited by accidental causes in very young children, ill-fed and ill-nursed.

We are also well informed of the multitude of instances in which means have been employed to communicate the *Small-Pox* to those who have been known to go through regular vaccination, and in which neither repeated inoculations, nor exposure to the disease in its most malignant type, have been able to produce any effect.

The means of ascertaining constitutional pervasion, in cases of *Vaccine* inoculation, have been practised, with, it is said, the most satisfactory results, for upwards of forty years, by several Vaccinators. It is to Mr. Bryce, a Surgeon of Edinburgh, that we are indebted for practical observations on this test. I cannot, however, but place in doubt its decisive criterion, on the ground that constitutional affection is often present in the *spurious Cow-Pox*: and this doubt, I am persuaded, cannot but be also entertained by others, although long experience and observation may have taught us to distinguish the external characters of the genuine, from the *spurious pustules*.

The test here proposed, is founded on the known fact, respecting *Small-Pox*; viz., that if a person be

inoculated with variolous matter, and the operation be repeated every day till the fever induced by the first insertion supervene, all the other punctures will advance with increasing rapidity: so that the puncture which has been made only twenty-four hours, will, at this period, equal in magnitude the original one, made eight days before. This idea, Mr. Bryce applied to the Vaccine disease; and he found that if a second vaccine inoculation was performed as late as the fifth or sixth day, it was so much accelerated in its progress, as to have the areola formed within a few hours after the first, increasing with its increase, and fading as it faded. This second inoculation is found to run a parallel course with the first, whether there be general fever or not; and this is undoubtedly the case in which a criterion for determining the constitutional affection is most wanted. The most proper time for performing the second inoculation, is about the end of the fifth, or beginning of the sixth day, from the first inoculation. If it be delayed beyond the sixth day, the affection produced by it will be very indistinct, and of short duration; and if performed at an earlier period, the contrast between the progress of the two infections, with regard to duration, will not be so great as may be thought necessary. If the second inoculation is not accelerated, but proceeds in the usual course, it proves that the first was not adequate to produce the constitutional pervasion, and, therefore, the 3d should be performed, as a counter-proof of the efficacy of the 2d.

It may not prove out of place here, (and particularly as it may revive an information, which, although of great importance, has been frequently neglected, if not lost sight of, by young practitioners,) were I to state, that in a Report of 449 out of 500 inoculated cases of Vaccina, many of the characteristics of the Cow-Pox were uniform, there being, first, the appearance of a small red pimple, in three to six days after inoculation; secondly, the gradual growth of it to the state of a circular or oval well-defined vesicle, by the ninth to the eleventh day, of from two-tenths to six-tenths of an inch in diameter, and often surrounded by an erythematous areola, and attended by pain of the axilla, or shoulder; thirdly, the gradual change of the vesicle into a black or dark-red, hard, glossy, prominent, round, firmly-adhering scab, by the fifteenth to the eighteenth day, which, in a week or ten days farther, falls off, leaving a cicatrix for life. This scab, which is not similar to that produced by any other affection, is a real *Anthrax*, or small carbuncle, from a part destroyed by the inflammation excited by the Vaccine virus. The red areola or erythema, is from the irritation of the dying or dead skin; and the cicatrix, is from the sloughing off of the dead part, leaving a cavity never afterwards entirely filled up.

We have also the following observations, as the results of extensive and varied experience, and they go far to controvert opinions often inculcated: That the difference in the effects of the Vaccine lymph inoculated, does not appear to depend on the presence, extent, or absence, of the red areola. And further, that though there be no febrile affection, provided the pock exhibit the distinctive characters of the Cow-Pock, *even without areola*, with the usual courses of the stages, the susceptibility to the Small-Pox will be as effectually destroyed, as if there had been considerable febrile affection, and extensive areola.

In submitting the above paper to the profession, we ought not to overlook the calamitous consequences now before us, from the inoculation with the Small-Pox, lamentably affording a constant source of infection throughout the rural sections, and thereby increasing the rapidity of its march. It is, however, a subject, which, from its bearing so intimate a relation with the preservation of the public health, and, as embracing in its extent, the whole of society, ought to fall within the province of Government, whose bounden duty is, at all times, to remove or diminish, through the most vigorous and effective means of its legislative authority, whatever evils result from the social state itself.

Could there, I would presume to inquire, be a greater anomaly in the codes of our Legislature, when, in its pages, we are instructed that thousands of pounds are annually expended for *preventing the introduction of contagious diseases* in the Province, when one of the most fearful and destructive to human existence is generating within, and is waging its influence, unchecked by the same legislative capabilities!

Yamaska, (near Sorel) 25th Dec., 1845.

* * * Since writing the above, a medical friend (a gentleman to whom I am indebted for some valuable information, and who has had the experience of upwards of twenty-five years in Vaccination) informs me, that, of late years, he discovered that in numerous cases which had borne the distinctive properties of genuine Cow-Pox throughout its regular stages, the pustules dried much sooner than formerly, and that the scab fell off at about fifteen days, and sometimes sooner, from the first insertion of the Vaccina.

These observations, corroborate in a great degree the comparative experiments of Mr. Viard, a French Physician, and member of the *Academie des Sciences*, that it is not, as is generally supposed, in the degree of development of the Vaccine pustules on the eighth or ninth day we must look for the degenerescence of the Vaccine matter, but in the progress, and more especially in the duration of the eruption, which diminishes progressively. In 1836, the

Vaccine of Jenner, after nine-and-thirty years' sojourn in the economy of man, gave rise to pustules which, on the twelfth day, were perfectly dried; whereas pustules originating from Vaccine matter taken from the cow that year, dried only on the seventeenth day. At present, the Vaccine of 1836 dries on the thirteenth or fourteenth day; whereas that recently taken from the cow (1844), only dries on the seventeenth. Thus, in sojourning eight years in man, the Vaccine of 1836 has decreased in its power of keeping up the eruption. Mr. V. concludes that Vaccine matter should be procured fresh from the cow every five or six years.

CASE OF HYDROCEPHALOCELE.

By HORATIO YATES, M. D., Kingston.

(For the *British American Journal Medical & Physical Science*.)

Mary Collins, of this town, a strong, healthy woman, a mechanic's wife, aged 30 years, was delivered early on the morning of the 16th November, 1845, of a full sized, healthy male child. It was her third confinement. By the second, she had twin sons. This was a footling presentation, and the labour lasted five hours.

Over the occipital bone of the infant, a little to the left side of the median line, and upon the margin of the lambdoidal suture, was a tumour as large as the infant's head itself, attached by a neck of one and a quarter inches in diameter. The whole of the tumour was covered with hairy integument, excepting a surface as large as a crown piece, at its most depending part, which was pellucid and membranous. The tumour was fluctuating, and evidently contained fluid. Manipulation further showed that the connection with the encephalon, through the suture, was limited.

Nine hours after birth, an incision was made into the membranous portion of the tumour, and five or six ounces of clear yellow serum flowed out, when an opaque membrane, forming a complete septum in the tumour, was discovered. This septum was then incised, and twelve or fifteen ounces more, of similar fluid, were discharged, making, in the whole, 20 ounces of serum.

The attachment was then examined from within the opening, and two vascular tumours presented; one on either side of the septum; the first as large as a filbert, the other, half the size. These in texture precisely resembled the choroid plexus.

The mass of integument which had enclosed the tumour was then excised at its attachment, where it was found much thickened and strengthened. A minute artery was tied; so also were the vascular tumours. Two fine sutures brought the cut edges of the wound together, and a piece of dry lint and a slight compress were applied over.

About an ounce and a half of blood was lost during

the operation, which affected the child considerably; but it very soon rallied. On the third day after the operation, the child had slight convulsions and expired. Assimilation appeared to have been entirely suspended since its birth, although the wound was healing kindly. The child's death may be attributed, in a great measure, to its having been deprived of proper nutriment, its mother having no milk for it. This was the more unfortunate, as the child was thereby deprived of its greatest chance of recovery from the very considerable shock of the operation, and the loss of blood.

It is supposed that there were originally two distinct herniæ of the dura mater, with its lining serous (arachnoid) membrane. The ultimate magnitude of the tumour, may, doubtless, be truly accounted for by the fact, that from the common resistance or pressure of the calvarium being absent at the site of the herniæ, the accumulation took place. The serum which is contained in every healthy arachnoid cavity, was, in this case, constantly being lodged in the sac. No limit to this accumulation existing, it had quietly gone on for months, until the period of utero-gestation had terminated, when from the change in the external relations of the infant, the necessity of surgical interference became evident.

As the sacs enlarged, their two proximate walls were united by cellular tissue, to form the septum of the common tumour, above mentioned. Therefore the septum was composed of two layers of dura mater, lined, of course, on both sides, by the arachnoid membrane. The scalp covering the whole in common, was dragged down with it, as in other tumours. To account for the absence of the integument and dura mater on that part of the tumour described as pellucid, it is clear that both had been absorbed, and that the serous lining membrane was the only covering left to that portion of the mass.

The vascular tumours were doubtless composed of pia mater, which had pressed through the openings, on account of there being no support from without, to balance the internal tension. Their vessels then becoming hypertrophied, the choroid looking bodies were the result. They were not attached to the margins of the foramina, but were connected from within only, leaving a free channel on every side, for the passage of serum towards the tumour.

The child had a lively eye, and an intelligent expression, generally; and was not constitutionally affected at all, as the subjects of spina bifida and chronic hydrocephalus often are. The disease under consideration, partook of the nature of both. It differed from true spina bifida only in its location, and, in fact, it may be as properly called *spina bifida cranii*, as *hydrocephalocèle* or *chronic hydrocephalus*. The former, I take it, signifies some deficiency of the osseous wall; the collection of serum being the natural result of that deficient

cy. Yet the latter synonyma are applied with perfect propriety to the case which has been here attempted to be described. Hydrocephalus of the arachnoid cavity, is, however, a very rare variety. This is an example of that variety.

It is a matter of regret, that a post-mortem examination of the head was not had, but the child died in the night, and was buried on the following morning, before an opportunity was afforded of seeing it, which misfortune leaves any internal anomalous appearance a matter of conjecture. But from all the circumstances it is imagined that there was no change or alteration in the encephalon, save the herniæ of the meninges of the brain.

That chronic hydrocephalus, situated *exteriorly* to the encephalon is an unusual form of disease, no one will gainsay; but that this unusual condition should obtain in hydrocephalus of the *arachnoid cavity*, is exceedingly rare. Indeed, the writer does not remember to have heard or read of another such case.

In the *London and Edinburgh Journal of Medical Science*, for May, 1842, the following is recorded:—"The patient was a boy eleven days old. There were two tumours, each as large as a nut, situated, one on either side of the bridge of the nose. They were discovered the day after birth, and were then the size of a pea. By pressing the fingers upon the tumours, their contents appeared to retire into the cavity. They were punctured, and a drachm or two of limpid serum was discharged. On the eighth day after the operation, the child died. Upon examination after death, the anterior cornua of the lateral ventricles were found to extend into, and communicate with, the cysts." Here was a case of hydrocephalus of the lateral ventricles.

A translation of a very curious case of a man æt. 26 years, from *Russ's Magazin für die Gesammte Heilkunde*, a German Medical periodical, was published in the *Lancet*, April 22, 1836. It is stated that at his birth, his head was soft and pulpy, and unusually large, and that in his third year, the fontanelles were not yet closed. His growth was slow, and he was longer in learning to walk and speak than children generally are. Yet he was precocious in his intellect, and at the age of four years, possessed a quick perception and sound understanding. As he grew older, the disproportion betwixt his head and the rest of his body became more and more marked. At the time when the case was made out, there existed a depression at the posterior fontanelle, large and deep enough to admit the larger half of a hen's egg; which, when placed in the cavity, might be observed to rise and fall synchronously with the expirations and inspirations. The whole of the right side of the face was misshapen in all its parts, and much lar-

ger than the left, which was quite natural in shape. The cheek resembled a fleshy bag distended with water; and if pressed upon, the hole in the upper and back part of the head would be instantly filled up, and the egg thrown out! The external angular process of the *os frontis* was deficient to an extent which would admit a goose quill. A similar opening existed in the mastoid process of the *temporal bone* of the same side. Still more striking was the defect of formation in the inferior *maxillary bone*. It was divided into three parts, which were held in apposition only by the muscles of the face and neck.

Space will not admit of more than a short abstract, which has been here made of the cases published in the works above mentioned. Indeed, more room has now been already taken up than was intended. For further details of them, the works themselves are referred to.

Kingston, Dec. 10, 1845.

We have to return our thanks to Mr. Justice M'Cord for the two valuable Tables of Temperature and Atmospheric Pressure for the city of Quebec, with which he has favoured our Journal. We believe there are few private gentlemen in Canada, who have devoted themselves more to meteorological pursuits than Mr. M'Cord; and being sensible that he has contributed but a small portion of the valuable information which he has collected on this subject, we would fain consider his present contribution, and his former one, as earnest of future favours, and of his sincere wish for the prosperity of this periodical. To the Rev. Mr. Leach, Dr. Rae, and Mr. DeRotterdam, our thanks are also due for their valuable papers, hoping that their labours will be again resumed in our favour, and prove the means of enlisting other collaborators in our physical department.

METEOROLOGICAL OBSERVATIONS ON THE BAROMETRIC RANGE AND MAXIMUM AND MINIMUM ATMOSPHERIC PRESSURE FOR QUEBEC CITY

To the Editor of the *British American Journal*.

MY DEAR SIR,—In the May number of your Journal, I took occasion to publish, compiled from the MS. Journal of the late Rev. Dr. Sparks, a table deducing from Thermometric Observations, carried with great care over a period of ten years, the mean temperature for the city of Quebec. I at the time promised to furnish you with other abstracts which I have made from the same tables, and in pursuance of that promise I send you the following, which will be found to furnish the monthly maximum and minimum atmospheric pressures as indicated by the Barometer, for the same years. The results obtained shew the maximum pressure, indicated by the greatest height of the barometer, to be 30.80 inches, and the minimum to be 20.80 inches, giving us a range, for the ten years over which these observations extended, of 2 inches. This maximum pressure was noted only once on 28th April, 1813. The minimum was observed on several occasions. I have the honor to be yours,

Montreal, January 8, 1846.

J. S. M'CORD,

TABLE of the Maximum and Minimum Pressure and Range of Barometer at Quebec, Lat. 46° 49' N., Long. 71° 16' W., for 10 years, compiled from MS. Journal of the late Dr. Sparks.

	1809.			1810.			1811.			1812.			1813.			1814.		
	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range
January..	30.200	29.000	1.20	30.200	29.200	1.00	30.40	29.35	1.05	30.20	29.10	1.10	30.10	29.10	1.00	30.10	29.10	1.00
February	30.300	28.800	1.50	29.900	29.200	.70	30.00	29.10	.90	30.20	29.00	1.20	30.30	29.00	1.30	30.30	28.70	1.60
March,.....	30.200	29.000	1.20	29.900	29.200	.70	30.35	29.10	1.25	30.10	29.40	.70	30.20	29.50	.70	30.10	29.00	1.10
April,.....	30.100	29.100	1.00	30.10	29.30	.80	30.00	29.20	.80	30.10	29.20	.90	30.80	29.10	1.70	30.10	29.00	1.10
May,.....	29.700	29.100	.60	29.90	29.20	.70	30.00	29.30	.70	30.00	29.40	.60	30.00	29.30	.70	30.00	29.20	.80
June,.....	29.900	29.300	.60	29.90	29.40	.50	29.90	29.25	.65	29.70	29.20	.50	30.00	29.40	.60	30.00	29.40	.60
July,.....	29.800	29.300	.50	29.80	29.30	.50	29.90	29.30	.60	29.80	29.20	.60	29.90	29.10	.80	29.80	29.20	.60
August,.....	29.900	29.300	.60	29.90	29.20	.70	29.95	29.40	.55	29.80	29.30	.50	29.90	29.20	.70	30.00	29.35	.65
Sept'r,.....	29.900	29.200	.70	30.00	29.30	.70	29.90	29.25	.65	30.00	29.30	.70	30.00	29.25	.75	29.90	29.20	.70
October,.....	30.100	29.050	1.05	30.10	29.10	1.00	30.20	29.00	1.20	30.00	29.00	1.00	30.0	29.10	.90	30.00	29.10	.90
November,.....	30.200	29.200	1.00	30.10	29.05	1.05	30.30	29.20	1.10	30.30	29.00	1.30	30.10	29.30	.80	30.25	29.20	1.05
December	30.400	29.200	1.20	30.20	29.10	1.10	30.00	28.80	1.40	30.10	29.00	1.10	30.20	29.20	1.0	30.20	29.20	1.00
	11.15			9.85			10.85			10.20			11.15			11.10		
Mean Mon. Range	.93			.82			.90			.85			.93			.92		
Max. of Month,.....	30.40			30.20			30.40			31.30			30.80			30.30		
Min. of Month,.....	28.80			29.05			28.80			29.00			29.00			28.70		
Range of Month,.....	1.60			1.15			1.60			1.30			1.80			1.60		

	1815.			1816.			1817.			1818.			RESULT.				
	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range		Max.	Min.	Range	Mean
January,.....	30.20	29.20	1.00	30.30	29.10	1.20	30.20	29.20	1.00	30.20	29.20	1.00	1809,.....	30.40	28.80	1.60	.93
February,.....	30.30	29.40	.90	30.20	29.00	1.20	30.20	29.20	1.00	30.20	29.20	1.00	1810,.....	30.20	29.05	1.15	.92
March,.....	30.30	29.10	1.20	30.10	29.10	1.00	30.30	29.50	.80	30.40	29.30	1.10	1811,.....	30.40	28.80	1.60	.90
April,.....	30.10	29.20	.90	30.00	29.20	.80	30.10	29.20	.90	29.90	29.90	.90	1812,.....	30.30	29.00	1.30	.85
May,.....	29.85	29.40	.45	29.90	29.10	.80	30.10	29.30	.80	29.90	28.80	1.10	1813,.....	30.80	29.00	1.80	.93
June,.....	29.70	29.30	.40	30.10	29.10	1.00	30.00	29.20	.80	29.90	29.30	.60	1814,.....	30.30	28.70	1.60	.92
July,.....	29.90	29.30	.60	29.90	29.10	.80	30.00	29.20	.80	29.80	29.30	.50	1815,.....	30.30	29.10	1.20	.795
August,.....	29.80	29.30	.50	30.05	29.15	.90	29.90	29.40	.50	29.90	29.40	.50	1816,.....	30.30	29.00	1.30	.91
September,.....	30.10	29.30	.80	30.30	29.40	.90	30.10	29.20	.90	30.00	29.20	.80	1817,.....	30.30	29.00	1.30	.875
October,.....	30.00	29.30	.70	30.00	29.30	.70	30.20	29.10	1.10	30.10	29.00	1.10	1818,.....	30.40	28.80	1.60	.92
November,.....	30.20	29.30	.90	30.10	29.35	.75	30.00	29.30	.70	30.20	29.20	1.00					
December,.....	30.30	29.10	1.20	30.30	29.40	.90	30.20	29.00	1.20	31.30	28.80	1.50				1.445	
	9.55			10.95			10.50			11.10			Max. of the 10 years ... 30.80				
Mean Monthly Range	.795			.91			.875			.92			Min. " " ... 28.80				
Max. of Month,.....	30.30			30.30			30.30			31.40			Range for the 10 yrs. ... 2.00 inches.				
Min. of Month,.....	29.10			29.00			29.00			28.80							
Range of Month,.....	1.20			1.39			1.30			1.60							

FORENSIC MEDICINE.

NEW TEST FOR BILE AND SUGAR.

By DR. M. PETTENKOFFER, (Ann. der Chem. and Pharm., Oct. 1844.)—This test is based upon the deep violet tint afforded by the addition of sulphuric acid and sugar to the bile; even when perfectly colorless. It is upon the choleic acid, (which forms the essential part of the bile,) that this reaction takes place. A little of the liquid suspected to contain the bile is poured into a test tube, and two thirds of its volume of sulphuric acid added by drops, so as not to allow the temperature of the mixture to exceed 144° FAHR., as a higher temperature would decompose the choleic acid; then add from 2 to 5 drops of a solution of one part of sugar to four fifths of water and shake the mixture; if bile be present, the violet red color will appear in a shorter or longer space of time, according to the quantity present. The precautions necessary to succeed are, not to allow the temperature to exceed 144° FAHR.; not to add too much sugar; the sulphuric acid must be free from sulphurous acid. If albumen be present in the

suspected liquor, it is best to coagulate it previous to testing, with a little alcohol or heat. If the bile be in small quantity, it should be concentrated in a water bath, extracted with alcohol, and this last evaporated to a small bulk, and the test applied to the solution when cold; this is particularly to be attended to, when the urine and other secretions are the subjects of experiment. By means of this test, bile was detected in the urine of a patient suffering under pneumonia. The fæces of a healthy man when extracted with spirits and tested, did not show any indication of the presence of bile, whereas in adding a little bile previously to the fæces, the test did not fail to indicate it. In all cases of diarrhæa bile is found in the stools,—so after the administration of calomel and other purgatives. This test reversed, may be used for the detection of sugar, that is to say, a mixture of bile and sulphuric acid is first made, and the suspected liquid added; if sugar be present, the violet red color will appear. This is a ready way of testing diabetic urine.

To test the blood for bile, albumen is first separated by boiling with alcohol, and the concentrated solution tested as already mentioned.—American Journal of Science and Art.

DEATH FROM ACONITE.—INQUEST.

In consequence of various rumours respecting the death of Dr. Male, an inquest was held at Birmingham, of which the following account presents some interest:

The first witness, John Barker, deposed that he had lived in the service of the deceased nearly eight years. On Wednesday, 23rd, he was out, and on Thursday about seven o'clock, witness took him up a cup of coffee, which he drank. He (witness) then went to the stable, and soon deceased came down, complaining of a pain between the bowels and chest; deceased had complained for some time past of pains in the back; he had some warm water taken up to him, and was sick two or three times; deceased asked him if he looked unwell, and witness replied he looked very unwell; in a short time, Miss Male, his daughter, came to him, about nine o'clock; on Friday the deceased sent for him; he appeared alarmingly ill, more so than he had ever seen him before; he said he wished to bid him (witness) farewell, and to evince his kindness and respect towards him; he seemed to consider himself in a dying state.

Mr. Russell, surgeon, of Newhall street, was next sworn, and said,—I have known the deceased for a number of years, he has complained to me occasionally, for six weeks or two months past, of pains in the back and loins; on Thursday morning, about half-past nine, his son, the Rev. Dr. Male, came for me, and on going to his father's house. I found the deceased in bed; his extremities were cold, the general surface of the skin cold and clammy, the pulse quick and feeble (at 130), with cramps and pains in his legs, and spasmodic pains in his stomach; he said his head was confused; he told me that, not experiencing relief, (alluding to the pains) from medicines in ordinary use, he had been taking tincture of aconite; he then asked me if I had ever given the medicine, and I said no; I then asked him what doses he had taken, and he replied on the preceding Sunday five drops, two or three times a day; I cannot be positive whether he said twice or thrice, but I believe he said two or three times a day, and had increased it to six, and ten drops; one dose of ten drops only had been taken on the previous night; he had been also suffering from diarrhoea for a few days, and had taken a dose of ten drops of solution of opium early that morning for it; I inquired where he had got his notion relative to the aconite; he said he had been reading a book now circulating through our societies treating upon the advantages of aconite in similar pains; he expressed his conviction that he should die, that the medicine was too powerful for him; but he also expressed his most earnest desire that he might recover, as his life was of the utmost importance to his children at this time; this he repeated during his illness, to myself and Dr. J. Johnstone: I cheered him as much as I could, reminding him of his former depression when ill, and that I thought he had nervous power sufficient to wear out the effect of the medicine he had taken; I gave him mild aperients to overcome the poison, with camphor and ammonia; his son-in-law, Mr. Amphlett, saw him along with me in the evening, and we left him somewhat, in our opinion, relieved; on Friday we again met, and towards evening with Dr. James Johnstone, as we found him more sunk, Dr. Johnstone agreed with us in our treatment, &c.; late that evening I found him in a dying state, gradually sinking; he was in a torpid state, from which, however, he could easily be roused, and then his intellects were clear; he had no paralysis; his death took place about ten o'clock on Saturday morning; he was perfectly composed, and took an affectionate leave of myself and others, reminding me

that for thirty-five years we had lived together in an uninterrupted friendship; twenty hours after death I made a post mortem examination, in the presence of Mr. Clayton, Dr. James Johnstone, and Dr. Bell Fletcher, and my son; his body, with the slightest possible exception, was in a healthy state; the blood was unusually fluid. Witness attributed death to the accumulated doses of the aconite depressing the nervous system.

In answer to some questions put by jurors,

Mr. Russell said, that such doses would not be likely to leave traces in a post-mortem examination beyond a fluidity in the blood. Had deceased been a younger man, in all probability he would have recovered from the shock of the medicine. Aconite is little used, and he was not prepared to say that ten drops would produce fatal effects.

The coroner then briefly alluded to the circumstances which had induced the family to request an inquiry into the melancholy event—an event which he, in common with the medical profession generally, most sincerely deplored. The deceased was respected and honoured in life, and his loss so calamitously brought about, would be extensively and deeply felt by more than one class of society.

The jury then gave in a verdict of "accidental death from an over dose of aconite taken medically by the deceased."—*Provincial Journal*.

CASE OF POISONING BY HYDROCYANIC ACID—RECOVERY.

By WILLIAM A. GUY, M.B., Cantab., Professor of Forensic Medicine, King's College, and Physician to King's College Hospital.

The following case of poisoning by hydrocyanic acid was for obvious reasons, not published at the time of its occurrence. It is now brought forward as, in many respects, an important addition to the cases which have recently been put on record. It is especially interesting as showing the interval of perfect consciousness and complete command of the voluntary muscles which may intervene between the swallowing of a large dose of prussic acid and the development of the characteristic effects of the poison, and it is a very striking example of a large class of cases of suicide in which the impulse to the commission of the act precedes the act itself by a very short interval, and springs up during a temporary excitement of the mind. The particulars of the case were noted down on the day following the attempt at suicide.

In the month of November, 1844, I was called up at night to see a young gentleman who had swallowed prussic acid. The particulars of the case, as detailed by himself and his relatives, are as follow:—He is the son of a medical man, is about nineteen years of age, and studying the law. His disposition is naturally cheerful; he has met with no disappointment, and never, until the present attempt, had contemplated suicide. His habits are temperate and industrious. On the afternoon of the day on which he swallowed the poison, he dined in the Hall of one of the Inns of Court, and drank, according to his own account, half a bottle of wine—a quantity much exceeding that which he was in the habit of taking. On reaching home he was observed to be somewhat affected by liquor, and before going to bed went, under some pretence, into the surgery, from which he took a stoppered bottle containing, according to the estimate of his father and the apprentice, from one to two drachms of prussic acid of the pharmacopœial strength, but, according to his own statement, about a mouthful. Soon after he had gone to bed the family was startled by a noise in his room as of a heavy body falling, and a relative, who was passing at the time, was alarmed by a loud gurgling noise. His father was almost immediately on the spot, and seeing the bottle on the drawers, dashed several buckets of water over the face and chest of

his son. This roused him. He was then taken into an adjoining room and put to bed, the treatment consisting in holding ammonia to the nostrils, and applying heat to the spine and feet. An injection was also given, containing tincture of assafœtida.

When I reached the house I found him in the following state, in which he had continued without alteration for three hours:—He lay on his back, drawing in his breath with great effort, each inspiration being accompanied by a loud gasping sound, and a distinct mucous rale. The pulse was upwards of 140 in the minute, and the respiration 36. The surface of the body was very cold; the countenance was of a dull leaden hue; the lips blue; the pupil extremely dilated, and the jaws rigid, in which state they had remained for the whole period, so that it had been impossible to administer any antidote. The treatment from this time forward consisted in holding ammonia under the nostrils, assiduous frictions with the flesh-brush, and the application of heat to the surface by means of flannels, warmed at the fire, and constantly renewed. At the expiration of about five hours there was some effort to vomit, encouraged by tickling the throat, and some bloody mucus was wiped from the mouth. Soon afterwards he could be made to swallow, when some warm brandy and water and some strong coffee were given him. At this time, too, he could be made to answer in monosyllables, and could raise himself on his elbows. He was also perfectly sensible, but looked bewildered. At the end of about six hours he was sufficiently recovered to answer questions, move himself about, and call for lemonade, which he drank freely. The mucous rale had disappeared, the respiration and pulse were still frequent, the pupil was restored to nearly its usual size, and the skin was warm. Being disposed to be quiet, and seeming out of danger, he was left to himself. After a time he complained of fulness at the pit of the stomach, and asked for an emetic, which was given him, with the effect of bringing off his stomach a large quantity of undigested food.

I saw him about fourteen hours after taking the poison, and found him quite well, though weak. He gave the following distinct account of the attempt of the night before:—He was suddenly tempted, as he said, by the devil to take prussic acid, under a confused idea that it would not hurt him. He swallowed, according to his own account, a mouthful of the acid from the bottle in bed. He then got out of bed, walked round the foot of it to a chest of drawers standing within a few yards of his bed-side, placed the stopper so firmly in the bottle that it could not be removed, and then walked back to bed, intending to get in again. He reached the side of his bed, sat down upon it, and then lost all consciousness. During all this time he said that he had no giddiness, and no unpleasant sensation of any kind, no more than if he had taken so much water. He also assured me, and his manner made me quite confident that he spoke the truth, that the idea of suicide had never before entered his head. The father of the lad has since informed me that the fœces, and, as he believes, the urine too, were expelled as the first effect of the poison.

On examining the bottle which had contained the prussic acid, it was found quite empty, so that it was not possible to ascertain the strength of the preparation which the lad had taken. From the statement of the father and apprentice, that the bottle contained one or two drachms, and that of the lad himself, who affirmed that he had swallowed a mouthful, it is highly probable that the dose taken was such as to prove fatal had it not been for the prompt application of the cold affusion, the continued use of ammonia, and the assiduous application of warmth, to the surface. At the time that I first saw the patient, the remedies most strongly indicated, in addition to those already employed, were warmth and friction to the surface, of which the first had been already applied,

but to an insufficient extent. The extreme coldness of the surface rendered such treatment imperative, and the blueness of the skin of the hands and face, the labouring respiration, and the abundant collection of mucus in the air-passages, furnished an additional reason for its assiduous application. Friction and warmth to the surface are as strongly indicated, after the patient has been in some degree roused from the first effect of the poison, as the cold affusion at the onset.—*Medical Times.*

SURGERY.

ON THE TREATMENT OF FRACTURES WHICH USUALLY UNITE IN A DEFECTIVE MANNER.

By M. GUERIN DE VAUNES, Anatomical Assistant of the Faculty of Medicine.

The author's principal aim in publishing these papers is to prove that, if certain fractures only unite by means of fibrous tissue, or by the formation of a more or less deformed callus, it is owing to a radical defect in their treatment. In fractures of the clavicle, which first engage his attention, most authors, from Hippocrates down, allow that the union is generally accompanied by some deformity, but he affirms that all writers to the present time have overlooked one of the most important indications of treatment. We need not follow M. Guerin through the lists of the different methods employed by surgeons at various periods, as these are sufficiently known to our readers; but many of his critical observations on this subject are worthy of being quoted, and naturally lead to the enunciation of his own views. "Hippocrates," he says, "in order to put the fragments of the clavicle in contact, had already advised a cushion to be applied between the shoulders, with a view of carrying outwards the external end of the clavicle. Paulus Ægineta, to attain this object, put under the armpit of the patient a pad of wool, which, according to Bichat, had carried art to its perfection; if employed to reduce the fragments, this process had been continued to maintain them; but Desault alone understood the mechanism of the displacement, and to fulfil the indications of this fracture, he made use of the humerus as a lever to push the shoulder backwards, upwards and outwards, in acting according to the natural direction of the bone.

"I partake the admiration of Bichat for the apparatus of Desault, which bears, says he, the stamp of true genius. I believe, nevertheless, that his bandage is insufficient; I wish it to be preserved entire, but with an addition to it, the nature of which will be presently better understood.

"If I admit that Desault has fulfilled the indications which consist in carrying the shoulder upwards, backwards, and outwards, to be consistent with what I have said, I must prove that there are others which have escaped him. That will not be difficult. Desault, in fact, like all the surgeons who have preceded and followed him, has only occupied himself with one thing, to put the external fragment in contact with the internal, and to maintain this position in acting on the arm or shoulder of the affected side. But nobody has thought of preventing the mobility of the internal fragment. Yet this is a fundamental principle in the treatment of these fractures, which has been overlooked. When the masters of art shew the point where the light ought to appear, all eyes remain fixed in that direction, till some one turns round and perceives a light on the opposite side. It is what has happened in the treatment of the fracture under consideration, for I read in the posthumous work of Desault: 'The power which carries downwards the top of the shoulder had appeared illusory to the ancient Greek physicians, who attributed the apparent

depression of this part to the elevation of the sternal fragment, and in this belief sought, by compressing it, to re-establish its lost level with the other. More judicious than those who went before him, Hippocrates demonstrated that their doctrine, false in its principles, was more dangerous in its consequences, and that the immoveable sternal fragment only lost its relative position with the humerus, because this was depressed by the weight of the arm, a doctrine evidently proved by the comparison of the sound shoulder with that of the affected side, which all practitioners have since admitted. The predecessors of Hippocrates attributed too much to the elevation of the sternal fragment, and the father of medicine deserves great credit for having shown the inefficacy, and even the danger, of compression applied on this fragment. But he led into error those who followed him, in sustaining that the inner fragment is immoveable. You will soon be convinced, if you repeat, on the dead subject, the following experiment, which I have performed several times.

“Break a collar bone by letting a dead body fall on the shoulder, then raise the arm of the opposite side; you will then see that the sternal fragment is not immoveable, and that it glides up and down on the outer fragment; if you carry back the arm of the sound side, the sternal fragment will glide on the other from behind forwards, whilst it will follow an opposite direction if you carry the arm forwards.

“This is not all; if you say to a man, having a fracture of the clavicle, and whose two arms hang down by the side of the body, to turn the head round to the healthy side, you will then see the internal fragment carried from below upwards, which is a consequence of the traction exercised on it by the sterno-cleido-mastoid muscle.

“These experiments prove, in an undeniable manner, that there is a connected action between the sound clavicle and the sternal fragment of the injured side; in the second place, that the riding of the fragments is not only on account of the external being drawn by the weight of the arm, but also to the raising of the sternal fragment which is drawn up by the sterno-cleido mastoid.

“I now speak of ordinary cases, in which the clavicle is broken transversely, and not of those rare cases in which the external fragment, fractured obliquely, at the expense of its inferior surface, is found placed above the inner fragment.

“In repeating these experiments several times, I am convinced that the mobility of the sternal fragment is in an inverse ratio to its length, that is to say, so much the less as the fracture has taken place further from the insertion of the cleido-mastoid muscle.

“This agreement existing between the healthy arm and the sternal fragment of the clavicle, I am bound to inquire if the different bandages and apparatus employed in the treatment of this fracture tend to maintain the inner fragment.”

“After having done so, M. Guerin asserts that he has not seen any apparatus which prevents this fragment being carried upwards, forwards, or backwards, according to the motions of the sound arm. It now remains for us to give, in the author's own words, a description of the means of securing a fractured clavicle in proper apposition, and to obviate the causes of displacement: which he has, pointed out. Like most persons who have hit on a novelty, perhaps he is disposed to invest it with more importance than it deserves, yet there can be no doubt but that his observations deserve attention for their truth and rationality, and his apparatus, cumbersome and disagreeable to the patient as it must be, may be found serviceable in cases of fractured clavicle, attended with considerable displacement of the broken ends of the bone.

“1st. The affected shoulder ought to be carried upwards, outwards, or backwards, as Desault has indicated, and, I

believe, there is not a better bandage for this object than that invented by that surgeon, provided it be rendered immoveable by dextrine or starch.

“2d. The thoracic extremity of the opposite side ought to be fixed to the chest, so as to prevent its movements. I know that the patient will thus find himself often embarrassed, not being able to eat without the aid of a nurse or friend, unable as he will be of raising himself, &c., he must always have near him a kind person charged to assist him in all his movements.

“A final indication yet remains to be accomplished; we must, in fact, oppose the contraction of the sterno-cleido-mastoid muscle. This end is attained in keeping the face of the patient turned on the side of the fracture, by means of starched bandages embracing the head and the affected shoulder, and thus putting the muscle in a state of relaxation. I do not conceal from myself the inconvenience of a mode of treatment like this, which, during a month, paralyzes all the motions of the upper part of the body; but many a woman of the world would submit to it willingly, in order to have a fracture united in a regular manner, and not deformed. Moreover, this bone, spongy, and penetrated by a grand number of vessels, has in itself a great disposition to produce callus, and it will be possible, at the end of some days, in which the fragments are kept in exact apposition, to permit the motions of the head without injury to the union.—*Archives Generales de Medicine*, March and June, 1845.—In *Dublin Journal of Medical Science*.

LIGATURE OF BOTH CAROTIDS.

Dr. Ellis, of the Grand Rapids, Michigan, relates, in the *New-York Journal of Medicine*, the case of a young man, on whom he ligatured both carotids with an interval of four days and a half between each operation. The patient, twenty-one years of age, was shot by a comrade, who mistook him for a bear; the ball struck him near the centre, and immediately above the spine of the scapula of the left side, passing out, after making a flesh wound of about two inches and a half, towards the neck, and after about the same space, it entered the neck over the centre and posterior edge of the sterno-cleido-mastoid muscle, passed up through the centre of the tongue, and out of it to the right of the mesian line, struck the lateral incisor, cuspid, and bicuspid of the right side, knocked them out, and the alveolar process, external to them; passed then through the upper lip, leaving a ragged opening through it. At the time there was little or no hemorrhage. During the night of the seventh day, secondary hemorrhage from the wound in the tongue occurred, but was readily subdued by compressing the left carotid and the orifices of the wound. The bleeding recurring the next night, Dr. Ellis applied a ligature to the left carotid. The patient then appeared to be doing well, until the eleventh day after the accident, when there was a return of the hemorrhage, which was arrested by compression of the right carotid. The loss of blood again occurring, it was decided, in consultation, that the lingual artery should be tied, or else the right carotid. The latter vessel was selected, as it was uncertain whether the hemorrhage was from the right lingual, or from the unligatured end of the left carotid, and also because there was considerable tumefaction under the angle of the jaw, so as to prevent the corner of the os hyoides being felt. The ligature of the right carotid did not cause any disagreeable feelings; there was not any fainting, no unpleasant sensations about the head; all the perceptible change was a slight paleness, and a cessation of pulsation in both temporal arteries, and of the hemorrhage. The pulse soon increased in frequency, but did not maintain itself at the high number, (140) it first reached. Some difficulty of breathing afterwards came on, with a hacking cough, which was treated with aconite and belladonna. The ligature from the left carotid came away on the seventeenth day, and that from the right on the fourteenth from its application. The wound on the left side continued to discharge for several weeks, when the portion of the artery between the ligature and wound sloughed, and came away in three pieces at different times. The patient, at the date of the report, was in comfortable health, and attending to business. Dr. Ellis, in remarking on the case, says

there are several reasons which make the above case very interesting. It shows the comparative safety with which both carotids can be ligatured, so far as the brain is concerned, and the danger of pulmonary congestion. It shows with what rapidity the anastomosing branches of the opposite vessel supply blood enough to give rise to pulsation in the temporal artery, and of course the danger of hemorrhage from the unligatured end of the artery, where it is not possible to ligature both ends of the wounded vessel.

ON THE OPERATION FOR HARE-LIP.

By M. PAUL DUBOIS.

At what period should we operate?—In the Academy of Medicine, on the 27th May, the distinguished Professor of Midwifery at the Hospital of the Cliniques, entered into an *extempore* detail of his views as to operating on very young children, and described the method which he prefers. M. Dubois first detailed the particulars of a considerable number of cases of infants operated on by himself or his friends, at intervals varying from a few minutes to several days or weeks after birth, and all of which had proved completely successful; he then proceeded to say:

The mode of operation which I adopt is that preferred by all surgeons of the present day. I pare the edges of the lips, and then unite the bleeding parts by a twisted suture. I make use of very fine pins called insect pins, and the ordinary waxed thread; I shall make but one remark with reference to the pins, viz., that those which I employ are exceedingly thin: the pins got at instrument makers are too long in proportion to their thickness; though the tissues to be pierced offer but slight resistance, that resistance is sufficient to make long and slender pins bend, which increases both the suffering and the length of the operation. It appears to me, then, much better to diminish considerably the ordinary length of the pins.

I have not had recourse to the proceeding advised by M. Clemot of Rochfort, and which my colleague, M. Roux, has sometimes employed, but for its acquaintance with which the medical public is solely indebted to M. Malgaigne. This proceeding, which has for its object to restore the median lobe of the upper lip, did not appear to me necessary in the cases which I have detailed to the Academy; and I was apprehensive also of complicating an operation, the success of which appears to me to depend on avoiding all important loss of blood, and in the simplicity and rapidity of its performance. In none of the cases which I have described, did I employ a uniting bandage in addition to the sutures. In this particular I have followed the example of my father, who never used one, either with infants or with adults. Neither have I substituted for the bandage the means employed by M. Bonfils de Nancy, which consists in having a person to compress with his hands the cheeks of the little patient in a manner analogous to the uniting bandage. I think that M. Bonfils' precaution is unnecessary, and may even prove a source of annoyance and agitation to the child; whilst the uniting bandage is attended with the same inconveniences, with this additional one, that it is almost certain to be displaced by the movements provoked by its presence, and then it is more injurious than beneficial.

The pain produced by the operation was strongly expressed, that is to say, by energetic cries; it is but right to add, that the cries indicative of real suffering were notwithstanding not more violent than they often were when the child was suffering much less, or even influenced only by desire. You understand, Gentlemen, that I have no intention of disputing the reality or even the acuteness of the pain resulting from the operation in the case of very young children, such as I have brought before you; but I may be permitted to say, that in their case the physical suffering is not combined with what would be added by the intelligence of a fiercer age; it is therefore very probable that they have but the more faint consciousness of suffering; and certain it is, that in my cases they did not retain the recollection or anticipation of it. This circumstance is not one of the least important of the advantages of operating early; and I shall by and by allude to its value in reference to the after-treatment. On the other hand, I believe, I may say that the feeling of pain is very rapidly dissipated in very young children; in all, in fact, sleep quickly followed the operation; two fell asleep immediately after the insertion of the last pin, and before more than a single turn of thread was put round it; the rest of the dressing was completed whilst they were asleep, and they were carried from the operation table to their cradle without awaking them.

In all the little patients the hemorrhage, inseparable from the divisions of the tissues, was very slight; I will except one, however, in whom it produced a little paleness. In two of these infants the blood, despite my precautions, passed into the mouth, and was swallowed; a faint sign of deglutition informed me of its occurrence. One of these vomited the blood half an hour after the operation; in the case of the other it passed into the alimentary canal, and was rejected by stool the following day. Swallowing the blood was followed by none of the colics, or other accidents, which have been represented by some surgeons as likely to compromise the success of the operation. In all the cases the after treatment was very easy.

M. A. Berard—"Will M. Dubois have the goodness to mention the treatment to which he alludes?"

M. P. Dubois.—That is just what I am going to do. In all the infants I removed the first ligatures twenty, and more frequently twenty-four hours after the operation, and substituted in their place others less binding. This treatment was repeated every day, until the withdrawal of the pins, diminishing gradually the constriction. In these dressings I was assisted by a person who secured the head of the child, and gently compressed the cheeks when it began to cry. The dressing caused some to cry; but to get them to stop it was only necessary to wait a few minutes before continuing to unroll the threads. It was often completed without awaking the child, especially where the parent, in expectation of my arrival, had obeyed my injunction, previously, to moisten the threads with warm milk. This liquid was preferred; since, if it penetrated into the mouth, which was almost inevitable, it might be swallowed with impunity.

The upper pins were generally withdrawn after the sixty-second hour, and the lower after from eighty to ninety-six hours. The differences, in this respect, depended on the greater or less apparent firmness of union. The Academy will doubtless remark, that the removal of the pins did not take place earlier than in subjects of a more advanced age; but it will also see, that the gradual slackening of the ligatures lessens the inconvenience of leaving the pins in a long time; and, besides, their presence is a useful safeguard, in the absence of other means of keeping the parts in apposition.

Only in one case, after the removal of the pins, did I apply a narrow stripe of court plaster, and even that was removed in a few hours. I think its use was not called for. I employed it because, deviating from my usual practice, I had removed all the pins sixty-two hours after the operation. This was in the youngest of the patients that I presented to the Academy; it was operated on five days ago, and the pins were withdrawn within the last forty-eight hours.

In all the children union took place rapidly and firmly; in none were the tissues cut, either by the pins or ligatures; and I dwell on this circumstance, because it seems to me to remove an objection long ago started by a great number of surgeons, and brought forward again in our own day by Dupuytren, viz., that in very young infants the tissues have a softness which renders them too easily cut by the needles or the ligatures. This objection, advanced by men of such eminence, merits the more attention; as the premises are true, although the conclusion is false. It is indeed true, that the tissues of new born infants are soft in a remarkable degree; but this softness, as Busch has, with great justice, remarked, is due to their extreme vascularity; and the circumstance, far from having an unfavourable influence on the operation, is one of the conditions the most advantageous for prompt union. As to secability, it is quite imaginary, if supposed, as I believe it was, to be so great that the tissues would not bear without tearing the traction necessary to bring the cut surfaces into apposition; but it is real in so far as ulceration, rapidly produced by foreign bodies introduced into the tissues, is concerned; and this ulceration may be very much accelerated by the compression exercised by tight ligatures. Still the effects of this tendency may be easily diminished, or even totally obviated, by the rapidity with which adhesion is effected, allowing the ligatures to be changed after the lapse of twenty-four hours.

In none of my cases was the giving of nourishment suspended; all were supported by means requiring considerable efforts of suction; two by the bottle, and the rest by the breast as usual; one ceased to take the breast only during the operation and the sleep that followed it; the others were fed by the bottle and artificial nipple for the first day only. I am happy to have the opportunity of mentioning that, in the two cases in which my father practised this operation on children younger than any I have presented to

the Academy, the use of the breast was not at all interfered with. The Academy will permit me to delay for a moment on the result of these operations,

Of the difficulties which have been supposed inseparable from the operation practised on very young children, there are none which have excited more attention and alarm in the minds of surgeons than those which depends on the efforts of suction, instinctively provoked, by the introduction into the mouth either of the natural or artificial nipple. I must also add, that even the partisans of the operation have admitted the reality of all these dangers. They first get rid of the difficulty by proscribing the operation; the second by extravagant caution, in permitting only a few drops of milk to be introduced into the child's mouth, or even compelling the little patient to fast for several days.

The facts which I have just detailed will prove, I hope, that the apprehensions entertained both by the adversaries and the partisans of the operation for hare-lip in very young children, are greatly exaggerated, and neither justify the objections of the one, nor the excessive caution of the other. Permit me also to add, that these very precautions are much more injurious than the dangers they were intended to obviate. I do not at all believe that a fast of two or three days can produce, as has been pretended, rapid marasmus, followed by yielding of the sutures, but I am confident that it is very hard to be borne by infants, and excites in their agitation and prolonged crying, as dangerous, in reference to the operation, as any effort of suction. Such was the case with those infants who were separated from their nurse for nearly an entire day, and when allowed again to take the nurse's breast, their tranquillity was restored. One of these was the eldest of the children brought before you.

One only, of the patients I exhibited to the Academy, cried violently and continuously for some days after the operation; I shall return to it in an instant; the others cried but little, and at long intervals. Sleep is the state which is almost habitual to infants during the first days of their existence. It is broken only to satisfy their wants, by suffering, or by desire. It has been evident that the operation, in those who underwent it, but little altered that happy state of things, which must tend to produce a favourable result. I have said that one only of these patients was an exception, it was the second in age of those I brought before the Academy; its cries, doubtless excited by artificial alimentation, which it endured with difficulty, were violent, and often continued during several hours; this circumstance alarmed me very much for the success of the operation, and made me sometimes regret that I had attempted it in this case; the result was, notwithstanding, most favourable, and you have doubtless remarked, that of the three infants which were presented to the Academy, the one of which I am speaking presents the least observable cicatrix, the mark left by the operation being, in fact, so slight, that considerable attention is necessary to discover it. Therefore it follows from these facts that the cries of infants operated on for hare-lip are less frequent than have been supposed, and that, even when most violent and prolonged, they do not hinder the success of the operation when the lips of the wound have been kept properly in contact.

DEATH FROM SUB-PERITONEAL RUPTURE OF THE STOMACH.

In the *Annales et Bulletin de la Société de Médecine de Gaud*, Professor Burggræve gives a case of very great interest, both to the pathologist and to the medical jurist, of which the following are the particulars, as far as they can be learned from the Professor's description.

"A surgeon of active and temperate habits, but occasionally guilty of errors in regard to diet, had been complaining, during six months, of what he believed to be gastralgia, when he was summoned to serve on a jury at Gaud. Suddenly, after partaking of a hearty dinner, he felt himself alarmingly unwell. His skin was cold, corrugated, and covered with perspiration; the pulse contracted, and scarcely perceptible; the voice almost gone; respiration anxious; abdomen tense, and enormously dilated; an emollient lavement was administered, when suddenly, during the efforts at defecation, emphysema made its appearance, and, extending to the neck, rapidly gave rise to the most alarming symptoms of suffocation. The action of the lungs

became partially suspended; the surface assumed a purple hue; the swelling increased with each effort of inspiration, and the patient, apparently involuntarily, was unceasingly engaged in efforts of deglutition. Soon all semblance of human shape almost completely disappeared, but occasionally a plaintive voice gave indication that the patient continued to suffer. Still intelligence was unaffected, and the patient calmly and collectedly took part in the consultation of three of his brethren as to the means to be opposed to such sudden and alarming indications, and, although hopeless of relief, strongly expressed his disapprobation of the proposal to practise paracentesis abdominis. From the very first a constant burning sensation of thirst caused the patient to cry out continually for cold water, which was swallowed with constantly increasing difficulty, although the involuntary efforts of deglutition were going on with ceaseless rapidity. Death took place immediately after an attempt to drink, but for a long time the chest continued to heave at gradually lengthening intervals, and every such effort swelled the body still more.

"*Sectio Cadaveris.*—The lungs were pressed back against the spinal column, and the heart was gorged with black blood. In the pericardium and right pleura there was some yellow serum, but no other lesion was observed in the chest. The anterior abdominal wall, enormously distended with gas did not collapse when the peritoneal cavity (which contained no air) was cut into.

"A cruciform incision shewed the stomach so distended as to occupy almost the whole abdomen, and its muscular coat appeared hypertrophied. On drawing it forward the gastro-hepatic omentum gave way and gas made its escape from the stomach through a large opening extending the whole length of the smaller curvature, from the cardia to the pylorus. At the place of rupture the muscular and mucous coats were in a state of pulraceous softening; the mucous coat, in proportion as it approached the opening, became injected with blueish blood, and sensibly thinned; there was no trace whatever, either of engorgement, ulceration, or adhesion; no other lesion could be discovered."

It is very much to be regretted that in his account of this important case, the Belgian Professor has not displayed more of that minute accuracy and precision which is the just boast of the French pathological school. We should like to know how long the patient lived after the alarming symptoms commenced, and the order of occurrence and exact nature of those symptoms; what were the means taken to test the integrity of the air passages, what were the contents of the stomach, and in what state, with many other questions necessary to satisfy our minds as to the exact nature of the lesion in question. The Editor of the *Gazette Medicale de Paris*, after quoting this case (which he considers *unique*), expresses doubts whether the air was actually effused from an orifice in the stomach, and seems inclined to believe that some lesion in the air passages had been overlooked, that the rupture occurred, not in the small, but in the large curvature of the stomach, and that the rupture of the muscular and mucous coats was caused by the same violence that tore through the peritoneum, or was wholly or partially occasioned by post-mortem erosion by the gastric juice, as in the cases described by Hunter. The following case, however, is so analogous, both in the excitatory phenomena during life, and in the lesions found after death, that we are inclined to take the Professor's facts as he gives them, the more especially as we have read in Haller's *Opuscula Pathologica*, and also in the *Archives Generales de Médecine* (Vol. X. or XI., by M. Marjoh), of emphysema arising from a breach of continuity in the intestinal canal, although we have not the volumes at hand to refer to. Many observers have testified that emphysema from this cause is not rare in the inferior animals. (*Obs. sur les Animaux domestiques par MM. Caabert and Huzard.*)

“Last month a coachman, twenty years of age, whilst on a journey to Limeburg got ill on the way, but continued to follow his master, although the weather at the time was very inclement. Increasing weakness compelled him, however, to remain at Helmstadt, where he was seen by Heister and others. The patient complained chiefly of difficulty of breathing and inability to swallow, but in particular he was continually affected with a peculiar suffocating sensation which made him feel as if drowning, and cry out to that effect (*quasi mox aqua suffocaturus esset*). His eyes were fixed and dim, and he had so much the appearance of a mad person, that it was difficult to say whether he cried out under the influence of delirium or not. The fauces were examined, and no swelling or other abnormal appearance could be discovered, but a soft puffy tumour, such as is called *emphysema*, occupied from the chin to the chest, and on being pressed a noise was produced, whilst the patient kept continually spitting out. The pulse was perfectly natural though rather weak, and the temperature of the body was not sensibly raised.”

The patient being almost unable to swallow, enemata and embrocations were employed, and he was directed to sip tea, and barley water. He died during the night.

No lesion of the air passages could be discovered. The lungs, liver, and stomach were inflamed where they respectively touched the diaphragm, and on drawing the stomach to one side a rent formed in it large enough to admit two fingers, the part that ruptured being completely gangrened. “*Examinavimus hoc foramen atque ventriculum ibi putridum sphaceloque corruptum deprehendimus.*”—*Heisteri Obs. Medica. Miscellanea, &c., in Haller's Disputationum Anat. Select.*, vol. vi.

The following is Professor Burggræve's exposition of the cause of death in the case which he has reported: “A rupture of the stomach took place under the peritoneum, and the air, forced through the opening by the movements of the chest, found its way into the general cellular tissue, chiefly along the spinal column, where this tissue is loosed, and was thence diffused over the trunk and extremities, hence the rapid efforts of deglutition which were remarked during life. The thoracic viscera and the large vessels were the first exposed to compression, chiefly from the air passing up through the posterior mediastinum. Compression was greatest in the neck, on account of the aponeurotic layers, amongst which are situated the trachea and great arterial and venous trunks. The air was arrested by the vault of the cranium, none of the foramina of which allowed it to pass, and in consequence the brain was left intact, and was only eventually affected by the incessant advance of asphyxia.—*Dublin Journal of Medical Science.*”

CHEMISTRY, MATERIA MEDICA, AND PHARMACY.

ON THE HYGIENIC AND TOXICOLOGICAL EFFECTS OF TOBACCO.

We this week redeem the promise made in our last number, to analyze the discussion that has lately taken place in the Paris Academy of Medicine, on the hygienic and toxicological effects of tobacco, one of the most important subjects connected with hygiene that can possibly be broached. The discussion was elicited, as we have already stated, by the report of a committee appointed by the Academy, at the request of the Minister of the Interior, to examine the reports, for the year 1842, of the medical practitioners attached to the tobacco manufactories. It was these same documents that we ourselves examined in a former volume of the *Lancet*, (November 18th, 1843.) On that occasion we entered into numerous details respecting the five government manufactories for tobacco, situated in different parts of France; as, also, respecting the various processes through which the tobacco has to pass during the conversion into snuff and smoking tobacco. To avoid repetition, we shall refer our readers to the article alluded to, merely prefacing our remarks by a few explanatory

statements, which will be indispensable to enable those who are not already acquainted with the subject to understand the influences to which the workpeople of the tobacco manufactories are exposed.

The tobacco used in the French factories is partly received from the colonies, and partly the produce of home growth. It is manufactured into three forms—viz., tobacco for *smoking*, for *chewing*, and for *snuff*. Only the first and the last of the three are made in considerable quantities, a very small proportion being prepared for chewing. Tobacco for smoking is made in the following manner:—The lighter leaves being chosen, they are moistened with a solution of marine salt; they are then cut into shreds, and laid to dry on hot plates. The process for making snuff is different. The leaves are, as before, moistened with a solution of sea salt, to prevent putrefaction, and cut into shreds, the larger ribs having, however, been extracted. The tobacco is then thrown into heaps, and allowed to ferment for several months. The temperature often rises as high as 130° or 140° Fahrenheit, and would become even higher, and carbonize the tobacco, were not precautions taken to prevent it. These precautions consist in the transfer, by manual labour, of the fermenting mass from one box to another. After it has thus remained during a sufficient time, it is ground in mills, and again heaped together to ferment. For these operations to succeed, great masses of tobacco must be wrought at the same time, as much, for instance, as twenty or twenty-five thousand pounds weight. From this brief sketch of the processes through which tobacco passes in its manufacture, it will be seen that the workpeople are exposed, during the entire period of their labours, to the emanations either of *moist*, *fermenting*, or *pulverized* tobacco; that is, that they are exposed to it in a form in which the tobacco must necessarily be more or less introduced into the economy by the skin and lungs.

A careful analysis of the reports addressed to the French government, leads to the following conclusions:—That workmen who newly enter the manufactories, generally suffer for a few days, or even weeks, from headache and nausea, but that those sensations soon disappear, except among a limited number of individuals, who are unable to accustom themselves to the emanations; that the health of the workpeople is generally good, better, indeed, than that of the neighbouring population—a circumstance which may, however, be accounted for by their superior wages and more regular life;—that there is no malady whatever, nervous or other, from which they appear more particularly to suffer; that their lives seem to be quite as long as those of other workpeople;—and that they are generally able to work until age or accidental illness stops their labours. It would even appear, from these reports, that the workpeople thus employed, enjoy, to a certain degree, exemption from phthisis. Let us now see how far these views are confirmed or invalidated by the recent labours and discussions of the Academy.

The committee appointed by the Academy was composed of three members, M. Laisleur, M. Longchamps, and M. Mezier. As the conclusions given above are fairly and legitimately deduced from the reports furnished to the minister, and handed over by him to the Academy, the committee was compelled, to either give its unreserved sanction to the conclusions, on the authority of their authors, or to examine the question itself. The latter course was the one resolved upon, and the manufactory of Paris, the largest and most important of all, was selected as the principal theatre for the committee's researches. The number of workpeople employed in that manufactory, alone, amounts to between twelve and thirteen hundred, the total number in the ten factories being about six thousand.

That the investigation might be as complete as possible, the committee first instituted a series of experiments on animals, with nicotine, the active principle of tobacco, to ascertain, with the greatest possible precision, the physiological and toxicological properties of the plant. The detailed account of twelve experiments on dogs, rabbits, and cats, carefully carried through, is given in the report. They all presented the same result; the effects produced being identical, whether the nicotine was introduced into the economy by a wound, by the buccal mucous membrane, or by the stomach. These effects were, nearly immediately, a peculiar state of disorder of the respiration, convulsive agitation of the diaphragm, convulsive and tetanic contraction of the muscles, vomiting, alvine evacuations, and death, if the dose was carried at all high. In the latter case, death was sometimes nearly instantaneous. Two drops of nicotine killed a cat; one drop killed

a rabbit; six drops produced all the above mentioned in two dogs, excepting death; another died with the same dose, as also did a fourth, which swallowed eight drops.

Having thus ascertained, by experiments, the effects produced on the animal economy by the active principle of tobacco—effects which are evidently those of a powerful poison, and may be compared with those of prussic acid,—the members of the committee commenced a series of researches in the tobacco manufactory itself. The workpeople were examined and questioned on the various processes; the influence of each on the health of those who are employed in it was analyzed; and the experience of all the officials was consulted. Indeed, every step was taken that appeared calculated to throw any light on the subject.

The following is the result of this inquiry, as contained in the report of the committee:—

All, or nearly all, workpeople, on their first admission to the manufactory, experience certain symptoms: cephalalgia, nausea, anorexia, insomnia, and diarrhoea. Generally speaking, these symptoms disappear in the course of eight or fifteen days. With some they do not give way at all, in which case they are obliged to leave the manufactory. The symptoms are more marked in women than in men. When once they have ceased to manifest themselves, the workpeople seldom complain, and are considered acclimated. In reality, however, they continue to experience the effects of the tobacco, as is proved by a change that takes place, in the course of time, in the colour of the skin. It gradually assumes a peculiar greyish tinge, which may be said to occupy a medium between the paleness of chlorosis and that of other cachexiæ. This change does not usually take place in less than two years. It may be remedied, like chlorosis, by the preparations of iron, and appears to be owing to some modification that has taken place in the blood, under the prolonged influence of the tobacco. A fact, which seems to show that the blood is modified in these workpeople, is, that when it is abstracted it is seldom buffed, so that it would seem to be partially deprived of its fibrin. One attempt was made to ascertain whether any of the principles of tobacco are contained in the blood, but none was found. An attempt was also made to discover the presence of nicotine in the urine, but without success. M. Boudet, the chemist to whom the experiment was entrusted, was not able to prove its existence, although he believes that it really is present. Plants (a rose-tree and a primrose) exposed to the emanations of the tobacco, in the workrooms, died down to the roots, but new shoots sprang up, which seemed endowed with considerable vitality. It appeared as if, like man, they suffered at first from the action of tobacco, but subsequently became injured to it. An orange-tree was not injured. Rabbits and birds remained a long while in rooms containing tobacco in a state of fermentation, without being, apparently, inconvenienced.

From what precedes, it is evident, says the committee, that the manufacture of tobacco is not a dangerous occupation; at the same time it cannot be considered innocuous. It exercises an evident influence over the health of those who are employed in its manufacture, both at first and at a subsequent period. These effects are, however, diminished by the extreme attention paid to the hygienic arrangements in the royal manufactories. It is impossible, at present, to give an opinion as to whether this kind of labour shortens life; first, from the continual change which is going on in the manufactories, and secondly, from the want of statistical documents. There are many old men to be found in them, some of whom have worked there from their youth. Most of them, however, seem to be labouring either under asthma, or from shortness of breath.

With reference to any beneficial influence which tobacco may exercise, the committee state that the workpeople are by its actions protected from, and cured of, rheumatic and neuralgic affections. It is also stated, that the manufacture of tobacco preserves them from intermittent fever, and probably from other epidemical diseases, such as dysentery, typhus, &c. Scabies is not met with, and other diseases of the skin are rare. As to phthisis the committee does not seem to adopt the views of those practitioners attached to the tobacco manufactories (five out of ten) who think that the tobacco exercises a decided preservative influence over the workpeople. Inquiries, however, are now going on which will throw considerable light on this question.

In the debate which followed the reading of the report—a debate which occupied two sittings of the Academy—several facts were elicited, and opinions expressed, which are worth recording. M. Gaultier de Claubry stated that in 1831, a large

pool of stagnant water formed near the Paris manufactory, that intermittent fever made its appearance, and that it affected the workpeople of the manufactory, as well as other residents in the vicinity. M. Desportes said, that after the year 1791, tobacco-making fell into the hands of men who went about the country to prepare that which was grown by private individuals. Those whom he had seen were mostly asthmatic, and he had observed the grey colour of the skin mentioned by the committee. He thought that the air of the workrooms ought to have been analyzed, and that the workpeople ought to be made to wash before taking their meals. M. Chevalier considered that the grey hue of the skin was merely a superficial colouring, produced by the tobacco, and would disappear on the use of soap and water. This the members of the committee denied. M. Rochoux said that the workpeople became accustomed to the emanation of tobacco because it was a vegetable substance. It was impossible to become acclimated to mineral emanations, whereas it was possible to become acclimated to vegetable ones. M. Fontan was sorry that the committee had not investigated the formation of ammonia in the workrooms. In the fermentation-rooms it was considerable, and might account for many of the facts which had been mentioned. He thought it probable that the fermentation-rooms would also contain nitrogen in excess, and a great quantity of carbonic acid.

From the above analysis it would appear that the principal novel fact brought to light by the labours of the committee of the Academy, is the circumstance of the economy continuing to be modified by the tobacco emanations, after the first symptoms of intoxication have disappeared, until a kind of cachexia is established. We scarcely, however, as yet, consider ourselves to be called upon to admit the entire correctness of these views. If such really be the case, now that this peculiar state has been pointed out, it will at once become evident to every one, and will be observed in all the manufactories, and wherever tobacco is manipulated to any great extent. A short time, therefore, will prove whether the committee be right or wrong in this respect. If the emanations from tobacco be sufficiently deleterious to deprave the system, as to produce, in the course of a few years, a well-marked cachexia, the conclusions drawn from the reports of 1842, on which we founded our previous remarks, cannot be considered to be perfectly correct. We should have, indeed, to plead guilty to the charge of having been misled by the reports of the manufactory physicians, and of having, consequently, attached too little importance to the noxious effects of tobacco. The future reports from the manufactories will, in the course of a few years, no doubt, enable us to decide this question, the only one of any importance on which the report of the Academy committee differs from those of the manufactory physicians.—*Lancet.*

PRACTICE OF MEDICINE AND PATHOLOGY.

CURE OF LARYNGISMUS STRIDULUS BY COD-LIVER OIL.

M. E. Roesch, in *Hufeland's Journal*, t. xc., gives several cases of this disease cured by cod-liver oil, in doses of a desert-spoonful four times a day. In some, other means were previously tried without the least benefit. The author concludes, from the rapidity of the cure, that enlargement of the thymus gland could not have been the organic cause of the disease, and he believes, that the curvative effect of the cod-liver oil is due to its *facilitating digestion*, and improving the tone of the constitution, and thus causing the nervous system to exercise only its normal influence.—*Dublin Journal of Medical Science.*

IODIDE OF POTASSIUM.

At the same Society M. Jaenger related the case of a man afflicted with chronic coryza, subject to frequent aggravation of intensity, which had been treated ineffectually some fifty times. M. Jaenger, being led to suspect old syphilitic taint, ordered him iodide of potassium, which effected a cure in three or four days.

Some cases of neuralgia, of long standing, and giving rise to partial derangement, as well as a case of enormous

enlargement of the thigh, with fistulous orifices, reaching to the bone, the sequel of a blenorragia, were also related in proof of the therapeutic efficacy of iodide of potassium in doses of from 10 to 15 gr. per day.—*Dublin Journal of Medical Science.*

MIDWIFERY.

CONTROVERSY BETWEEN DR. SIMPSON AND DR. LEE.

We had some time since briefly to notice the controversy which had arisen between Dr. Simpson, of Edinburgh, and Dr. Radford, of Manchester, with respect to the priority of the discovery of the new plan of treatment in cases of placenta prævia, which the concurrent testimony of a large proportion of the members of the medical profession has shown to be not only available in such cases, but also of pre-eminence utility. A pamphlet, reprinted, from the pages of the *London Medical Gazette*, now lying before us, contains the details of another controversy which has been carried on in that journal between Dr. Simpson and a different antagonist, Dr. Lee, of Saville-row, whose previous engagement with Dr. Paterson, concerning the *corpus luteum*, must still be fresh in the memories of our readers.

It appears that Dr. Simpson published in the *Medical Gazette* for October the 10th, a communication entitled, "Some Remarks on the Treatment of unavoidable Hemorrhage, by Extraction of the Placenta before the Child, with a few observations on Dr. Lee's Objection to that Practice." In this paper Dr. Simpson commences by exposing his views as to the origin of the hemorrhage in cases of placenta prævia, which he believes to be produced principally from the open venous orifices of the placenta, in opposition to the opinion generally prevalent in the profession that the hemorrhage is derived directly from the uterus. The reason on which Dr. Simpson bases this opinion is, that the placental orifices are not, like the uterine, surrounded by contractile fibres capable of constricting them: they are in free communication with the general vascular system of the mother through the medium of the maternal vascular, or cavernous system of the placenta; and the blood in that cavernous system escapes readily from the exposed venous orifices on the surface of the placenta—that being, in fact, so far, its natural and forward course.

In cases in which the placenta is partially and repeated detached before labour begins (as happens frequently in placental presentations), before each attendant attack of hemorrhage is arrested, the vascular system of the separated portion of placenta seems to require to become blocked up and impervious, with coagulated and infiltrated blood. This obliteration of its vascular cells prevents the further circulation of maternal blood through the detached part of the organ, and hence prevents also the further escape of it from its exposed surface. Each new detachment gives rise to a renewed hemorrhage, which again ceases on the sealing up of the vascular system of the detached part. A few cases of placental presentation are on record in which there was no attendant hemorrhage when labour supervened, the tissue of the placenta having, throughout the whole organ previously become so morbidly changed, obstructed, and impervious, as not to have any quantity of blood circulating in it and ready to escape, when at last its surface was separated from the interior of the cervix uteri under the occurrence of the uterine contractions.

In common cases of unavoidable hemorrhage, the amount of the attendant flooding seems to be as much regulated by the quantity of placental surface still remaining attached to the uterus, as by the quantity already separated from it—the degree of flooding depending as much, or more, upon the extent of the means of supply of blood, as upon the extent of its means of escape. And in proportion as we approach nearer and nearer a total separation of the placenta, the number of its afferent utero-placental vessels is diminished, till at last we find that when the one organ is once completely separated from the other, the flooding is instantly moderated, or entirely arrested; for the placenta ceases to yield any discharge of maternal blood, as soon as its own supplies from the maternal system are thus cut off by the disseverment of all its organic and vascular attachments with the uterus.

Reasoning on these facts, and supported also by the direct evidence derived from two cases of unavoidable hemorrhage, which had occurred some years ago in his practice, in which the loss of

blood moderated or entirely ceased as soon as the whole placenta was completely separated—a spontaneous occurrence—the non-recurrence of hemorrhage after the placenta has been removed having been noticed also in cases where its abstraction had been effected by midwives and others in cases of supposed mismanagement—Dr. Simpson was led to the conviction that, in some complications in unavoidable hemorrhages, the principles of treatment successfully acted upon by nature might be advantageously adopted. He accordingly drew up an account of 141 cases of placental presentation, in which the placenta was expelled or extracted before the child, from an analysis of which he drew the following deductions:—

1. The complete separation and expulsion of the placenta before the child, in cases of unavoidable hemorrhage, is not so rare an occurrence as accoucheurs seem usually to believe; and it is not by any means so serious and dangerous as (according to the commonly received doctrines of uterine hemorrhage) might a priori be expected.

2. In 19 out of 20 cases in which it has happened, the attendant hemorrhage was either at once altogether arrested, or became so much diminished as not to be afterwards alarming.

3. The presence or absence of flooding after the complete separation of the placenta, does not seem in any degree to be regulated by the extent of the interval intervening between the detachment of the placenta and the birth of the child.

4. In 10 out of the 141 cases, or in 1 out of 4, the mother died after the complete expulsion or extraction of the placenta before the child; whilst, as we shall see immediately, about one in every 3 of the mothers dies under turning and extraction of the child in unavoidable hemorrhage.

5. In 7 or 8 out of these 10 natural deaths, the fatal result seemed to have no connection with the complete detachment of the placenta, or with consequences arising directly from it; and if we did admit the 3 remaining cases (which are doubtful), as leading by this occurrence to a fatal termination, they would still only constitute a mortality from this complication of 3 in 141—or of about 1 in 47 cases.

Dr. Simpson acted in accordance with this view, and we need scarcely add, after the numerous instances of success we have already recorded in this journal, his patient made a perfect and speedy recovery. As we have already remarked, in the commencement of this article, his claim to the priority of the practice is disputed by Dr. Radford, of Manchester, who indeed brings forward strong evidence to show that the same plan of treatment was adopted many years ago. On this point, however, we will not now dilate; let it suffice that the entire separation and abstraction of the placenta prior to the birth of the child has been found an unfailling remedy in cases of unavoidable hemorrhage by a large number of medical men, who have already recorded the results of their experience in its favour. It was not, however, to be expected that so great an alteration from the old plan of proceeding should be carried into execution, *namine contradicente*. Accordingly we find in the *Medical Gazette* for September the 19th, that Dr. Lee has entered his dissent against it.

To the remarks offered in that communication Dr. Simpson demurs; in the pamphlet now before us he examines into the objections, and corrects the mistakes committed by Dr. Lee. These we shall notice *seriatim*.

The first objection which is canvassed is, that Dr. Lee sees no reason to depart from the practice which has been followed in placental presentations, from the days of Ambrose Paré to the present time. The usual practice in these cases is well known to all. 'The operation of turning (he observes) is required in all cases of complete placental presentation; but is not necessary in the greater number of cases in which the edge of the placenta passing into the membranes, can be distinctly felt passing through the os uteri.' (Lectures, p. 372) In these last, rupture of the membranes is sometimes sufficient.' This opinion against the new plan of treatment is supported by Dr. Lee adducing a tubular view of eight late cases of placental presentation, in all of which the mothers recovered. In three of these cases turning was practised; three others craniotomy; in one the membranes were ruptured; and in the eighth the placenta was perforated. Only three of these cases were complete presentations; four were partial, and one was uncertain. In opposition to this Dr. Simpson brings forward the result of sixty-one cases, drawn from Dr. Ramsbotham's reports of the Maternity Charity, and Dr. Lee's previously published cases, in all of which turning and extraction of the child were had recourse to. Twenty-four out of the sixty-one mothers sunk

under this treatment; so that about sixty-five per cent. were saved, and thirty-five per cent. died.

The great mortality resulting from the treatment of turning in placental presentation, may be more strongly shown to some minds if the fact is stated in another form. In order to ascertain the fatality of the Cesarean section abroad, Dr. Churchill collated with much care the histories, from foreign authorities, of 371 cases of the operation. Out of these 371, 217 mothers recovered, and 154 or nearly 1 in every 2 4-10ths died (Midwifery, p. 318). This is exactly, and to a fraction, the degree of maternal mortality accompanying turning in placental presentations, in the cases reported by Dr. Lee in his Clinical Midwifery. In other words, the success of turning in unavoidable hemorrhage, in Dr. Lee's private and consultation practice (as reported in that work) has not been greater than the reputed success of the Cesarean section upon the continent of Europe.

The second objection is referable to a mistake made by Dr. Lee, who appears to suppose that Dr. Simpson recommends the artificial detachment of the placenta in all forms of placental presentations in which turning is at present adopted, whereas Dr. Simpson explicitly mentioned it as to be adopted when rupture of the membranes is insufficient, and turning inapplicable or unusually dangerous. It will be found, for instance, the proper line of practice in severe cases of unavoidable hemorrhage complicated with an os uteri so insufficiently dilated and undilatable as not to allow, with safety of, of turning; in most primiparæ; in many of the cases in which placental presentations are (as very often happens) connected with premature labour and imperfect development of the cervix and os uteri; in labours supervening earlier than the seventh month; when the uterus is too contracted to allow of turning; when the pelvis or passages of the mother are organically contracted; in cases of such extreme exhaustion of the mother as forbid immediate turning or forced delivery; when the child is dead: and when it is premature and not viable.

Dr. Simpson quotes eleven cases of placental presentation from Dr. Lee's Clinical Midwifery in illustration of the first set of cases, where, with unavoidable hemorrhage, the os uteri was thick, rigid, and undilatable. Of these eleven cases three only of the mothers survived, two of them making a very narrow escape from death. Dr. Simpson, in commenting on these cases, says he doubts "if the most fatal of all human diseases—the plague itself—be found to destroy so large a proportion of those attacked. At all events, the operation of turning and artificial delivery, in unavoidable hemorrhage, with the os uteri imperfectly dilated, would, from these and other cases, appear to be more deadly than any operation that is deemed justifiable in the whole circle of surgery. It is more mortal even than ovariotomy." On the other hand, he believes "that in the above and similar cases, by the introduction of a finger, or of a common sound or bougie (such as Dr. Hamilton employed when the os uteri was still shut, in order to separate the membranes for some inches from the cervix, in order to induce premature labour), the placenta might be readily and completely detached—the attendant bleeding in this way arrested—and the labour subsequently allowed to proceed to a natural and safe termination, if it were a head or pelvic presentation. And if the child were placed transversely, a more safe and proper period could be waited for and selected for the version of it." The separation of the placenta, according to the conjoint testimony of Dr. W. Hunter, and Dr. Lee, may, in the generality of instances, be readily effected.

The third objection made by Dr. Lee, that the practice of extracting the placenta, was not followed by Guillemeau, Mauriceau, Portal, Levret, Giffard, &c., is certainly most futile; for if new plans of treatment are not to be adopted because not sanctioned by ancient authorities, the science of medicine must sink into a mere art, and be governed merely by precedent. Dr. Simpson, however, fully confutes the statement made by Dr. Lee, as far as regards Portal, from whom he quotes the following passage. Portal is describing his 43rd case:—"Je glissai ma main dans l'entrée de la matrice, ou je sentis l'arrière-faix qui se présentait. L'ayant séparé, afin de me frayer le chemin, je sentis les membranes de ceux que je perceai, et les eaux s'étant écoulées, je tirai l'arrière-faix le premier, afin qu'il ne m'incommodât point à la sortie de l'enfant." Nothing can be clearer; the separation and abstraction of the placenta prior to the birth of the child, is set down in the clearest and most positive language.

The fourth objection made by Dr. Lee is readily disposed of. Dr. Lee refers to the case recorded by Guillemeau of an ignorant impostor, who, attending a lady in childbirth, pulled away part

of the placenta, the patient dying of hemorrhage. It is consequently not a case in point; the entire separation of the placenta is what Dr. Simpson contends for, as alone capable of arresting the hemorrhage and saving the mother's life.

Dr. Lee's fifth objection is, that the child would inevitably be lost by this mode of practice. This objection is more apparent than real. According to the old plan of proceeding, about sixty-five per cent. of the children were lost; while, according to Dr. Simpson's statement, out of 105 cases in which the placenta was expelled before the child, the infant was born alive in thirty-three instances, that is to say, thirty-one per cent. were saved. He adds that "in most of these cases the child was expelled within a few minutes after the complete separation of the placenta. When the interval is longer, and we require, after the detachment of the placenta, to wait for a length of time, is there no hope of making the child survive by continuing either its placental or pulmonary respiration during the intervening period?" Dr. Lee tells us that in some case of pelvic presentation, acting upon the suggestion of Dr. Bigelow and "older accoucheurs," he has, before the head could be extracted, pressed back the maternal parts "that the air may gain admission into the mouth of the child and the respiration go on, when the circulation in the cord has been arrested. I have seen (he adds) from twenty minutes to half an hour elapse in some cases after the cord had ceased to pulsate.

If the head be low down, the fingers can alone give the necessary assistance; but if it is high in the pelvis, and reached with difficulty, the assistance of a tube may be required. (Lectures, p. 335.) Is it hopeless to suppose that the same principle, or other means, may yet be successfully employed to keep the child alive, after the placenta has been extracted in unavoidable hemorrhage, and in some cases give it even a greater chance of life than under the continuance of the flooding, or the operation of forced delivery?"

The sixth and last objection raised by Dr. Lee is, that one of Dr. Simpson's tables gives an erroneous view of the common degree of maternal danger attendant on placental presentations, when it shows that one out of three mothers perishes under this obstetric complication. While admitting the occurrence of some inadvertent errors in his statements, arising from the pressure of his occupation, Dr. Simpson, in his answer, shows from the statements made by Dr. Churchill, and by Dr. Lee himself, that he has not overrated the danger in these instances.

This special objection made by Dr. Lee, led to a correspondence between Dr. Simpson, Dr. Ramsbotham, and Dr. Lee, which we shall next proceed to examine.

The letters which passed between Dr. Simpson and Dr. Ramsbotham have reference to some arithmetical inaccuracies, which both frankly acknowledge, Dr. Simpson excusing his error on the plea of the almost insuperable difficulty of securing perfect accuracy in tabular returns, and Dr. Ramsbotham referring his mistake to an error of transcription.

The succeeding correspondence between Dr. Simpson and Dr. Lee, which, *Hibernice*, may be said to open in the concluding letter from the Edinburgh professor to Dr. Ramsbotham, is one upon which we scarcely care to dwell, as it has not been conducted as medical controversies connected with matters of science should be—a marked degree of ill feeling having been exhibited on both sides, and matters totally irrelevant to the subject in debate having been introduced—the sole effect of which—we will not say the intent—must be to depreciate the scientific character and standing of one of the disputants. The absolute matter in dispute between these gentlemen is, whether Portal has described more than eight cases of complete placental presentation, and further, whether he has detailed any cases of partial presentation of the placenta. Dr. Lee asserts, that in Portal's work, as stated by him in his "Clinical Midwifery," there are described eight cases in which the placenta was not merely at the os uteri, but adhering to the cervix all round, and that the remaining cases were instances of partial presentation. To this Dr. Simpson demurs; he admits fully the eight complete cases, but regards the others described by Portal as equally complete. He says, "I have procured here a sight of Portal's work, lest my memory should have possibly deceived me, and find that the other cases (six in number) are as follows. After relating Case 29, in which the head of the child, in its exit through the os uteri, actually perforated *through* the placenta itself (the placental presentation being hence complete), Portal adds, that not long afterwards he delivered a gentleman in St. Dennis Street, under the same circumstances in the presence of Dr. Linkard, &c. In Case 51, Portal tells us, that the placenta was placed just before, and quite

across the whole inner orifice of the uterus,' and 'in concluding the history of this (51), he states, that in the year 1683 he had completed the delivery successfully in five similar cases, all the women having recovered.' (Dr. Lee's Lectures, p. 366). 'In the year 1683,' observes Portal, in his own account, 'I delivered five women under the same circumstances.' &c.

"We regret to observe that, in closing his correspondence with Dr. Lee, he challenges this as a misstatement on the part of Dr. Lee, instead of a misapprehension, as it might have been, and as he (Dr. Simpson) might have been expected to interpret it, after remarking in a previous letter addressed to Dr. Lee, that 'the investigation is of such a kind that two persons, with every anxiety for truth and accuracy, may read and interpret differently the very data upon which we have to work.'" We feel still more regret that such a charge should have been made, as it elicited a note from Dr. Lee, which we are sure, on due deliberation, he must deeply regret ever having penned.

It is a source of great vexation and of humiliation, that members of the medical profession, educated as gentlemen, holding rank and station as such, and being received and treated in society as such, can, when they enter into controversy with each other, whether it be on questions of theory or points of practice, so far forget their high calling, as to descend to personalities and rude attacks on each other, instead of devoting their time and attention to the investigation of the matters in doubt between them. *Mais patience, le bon temps viendra*, and, although the idea may seem Utopian, we yet entertain a confident hope that ere long the members of our profession will remember on all occasions that they are gentlemen.—*Medical Times*.

VESICO-VAGINAL FISTULA.

DR. BERTHE read three cases in which he had succeeded in curing vesico-vaginal fistula by cauterisation assisted by insufflation. After preparing the patient as usual, he blows air into the bladder continuously during the operation, so as to render the fistula prominent in the vagina, and to separate its lips. He then cauterises with a red-hot cautery the entire extent of the edges of the wound. Subsequently, these edges arc, at short intervals, cauterised with the nitrate of silver, and the vagina is kept plugged with cotton, introduced by means of the speculum. The patient is placed, whilst the treatment lasts, in such a position as to prevent the urine from bathing the edges of the wound. The regimen must also be severe; the more so the better. The only food which he allows is a small quantity of dry bread or toast, along with a little boiled or roast meat. The effect of this diet is to diminish the quantity of urine secreted, the excretion of which is the principal obstacle to the cure of the disease.—*Reports of Academic de Medicine—Lancet*.

CÆSARIAN SECTION: BOTH MOTHER AND CHILD SAVED.

At a Medical Society of the Upper Rhine, M. Dittmar, at the request of the President, gave the following verbal account of a case in which he performed this operation with complete success:—

"Barbe Gerber, aged 38, living near St. Marie-aux-mines, of apparently a good constitution; is the wife of a poor day labourer, who supports, with difficulty, a numerous family; her parents, as well as her brothers and sisters, four in number, have always enjoyed good health. In six pregnancies, previous to that of which we are speaking, she carried her infants to the full term, but after the fourth malacostion, accompanied with chronic bronchitis, made its appearance, recurring with increased severity at every succeeding confinement, so that during the sixth she completely lost the use of her lower extremities; notwithstanding, under the use of cod-liver oil, her state improved very much. The consequence of this disease was a remarkable diminution of stature, and a deformity of the pelvis, rendering the sixth accouchment very tedious; it was, however, accomplished without the aid of a physician.

"During the whole period of the seventh pregnancy, the patient found herself very well, with the exception of some little difficulty in walking. On the 1st of August last she felt labour pains, and on the 2d, at six in the evening, the

membranes ruptured, and a left hand presented. M. Dittmar was not sent for until midnight, when the following was what he found: through the belly, which was very prominent, he felt the head of a fœtus above the upper straight of the pelvis, resting on the pubic arch. The vulva was enormously swollen, and between the labia appeared the left hand of the child. The 'toucher' astonished M. Dittmar by informing him of the extreme narrowing of the biischiadic diameter, and of the closing in of the pubic arch, which would barely admit of the passage of two fingers. It was with great difficulty that he was able to satisfy himself as to the position of the child; the occiput rested on the right half of the symphysis pubis, with the forehead turned toward the left sacro-iliac synchondrosis, also resting on the brim of the pelvis. Strong uterine contractions, quickly succeeding each other, only increased the tumour on the head of the child; the head itself remained fixed. M. Dittmar at first thought of breaking up the head, and then extracting it with the cephalotribe, as he had done in a similar case a few weeks before, but being soon convinced, from the state of the pelvis, that even this operation was impracticable, he had a consultation on the case with M. Wolf.

"The first thing to be done was to learn accurately the dimensions of the pelvis, and the following are the conclusions at which they arrived: The height of the woman is 1^m. 40 (4¹/₂, 9-11),* the vertebral column presents no deviation from the normal state, the last false ribs on each side touch the internal margin of the crest of the ilium.

"From one anterior superior iliac spine to the other is but 0^m. 27 10.63 in.)

"From sacrum to symphysis pubis, 0^m. 18 (7.08 in.)

"From one trochanter to the other, 0^m. 27 (10.63 in.)

"The sub-pubic antero-posterior diameter, 0^m. 026 (3.38 in.), from which 0.005 (0.23 in.), must be deducted for the soft parts. The right oblique diameter, approximately estimated from external measurement, is 0^m. 06 (2.26 in.), and the left a few millimetres more. The coxysub-pubic diameter, 0^m. 053 (1.86 in.), and lastly the biischiadic diameter, 0^m. 06 (2.26 in.)

The ilio-pubic arch, in place of being widened, presents a marked convexity inwards, greater at right than at left side; in consequence of this deformity the symphysis is very prominent, projecting in a beak-like process, and its plane is nearly horizontal, its inferior edge being turned towards the sacro-vertebral angle.

These measurements having convinced both practitioners that it was absolutely impossible for the head to pass down into the pelvis and clear the inferior aperture, they thought of the Cæsarian operation as the only means of safety to both mother and child, and proceeded to practise it at noon on the 3rd of August.

The incision was made in the linea alba, and extended four or five centimetres (one and a half to two inches), beyond the umbilicus; a small omental hernia occurred at the superior extremity of the wound, but was easily reduced. The bladder, rising about six centimetres above the pubis, prevented the incision being extended in that direction, and the uterus had to be swayed forward a little in order to carry the incision sufficiently far upwards. A female infant, at the full term and in perfect health, with the exception of a slight depression of the parietal, produced by pressure against the sacro-vertebral angle, was easily removed through the wound which had been made. The umbilical cord was very short, and so frangible that on extending it a little it ruptured in two places. The uterus contracted strongly after being emptied of its contents, but M. Dittmar, apprehensive that the wound would close so much as to prevent the removal of the placenta, brought it away by introducing his hand, it having some points of ad-

* The numbers in parenthesis are the French measures reduced to English inches and decimal parts.

herence. The uterine contraction afterwards relaxing unequally at the two edges of the wound, it remained gaping and bossed at one side; to prevent the intestines insinuating themselves into it, it was closed by a single point of interrupted suture, the integuments were brought together by four points of interrupted suture, and the dressing was completed by slips of adhesive plaster covered by charpie and a bandage.

The reaction following the operation was very slight, the lochia made their appearance on the third day, and soon became purulent, at the same time the breasts enlarged, and gave milk freely. Circumscribed peritonitis appeared several times in the hypogastric region, but was dissipated by leeches, cataplasms, and mercurial frictions, constipation was combated by castor-oil and calomel. The only alarming symptom that presented itself was in the chest; the patient, being affected with mucous catarrh, had the respiration very much impeded by the intestines being pushed up towards the chest, and by the copious mucous choking up the bronchi; this state of things was very much improved on the removal of the bandage. Cicatrization of the wound went on rapidly and was completed on the 25th day, with the exception of a small fistulous opening, which it took two weeks longer to heal. Six weeks after the operation the patient was able to work.—*Gazette Medicale de Strasbourg*.

MISCELLANEOUS.

ORIGIN AND PROGRESS OF STORMS IN THE UNITED STATES.

[From the report of the Surgeon-General of the United States Army to the Secretary of War, dated Nov. 1, 1845, we copy the following letter from Mr. Espy, the meteorologist, to Dr. Lawson. Mr. Espy, as well as the Surgeon-General, deserves great praise for his meteorological investigations, and it is gratifying to perceive that their researches are likely to be crowned with success.]

SIR.—With the aid of Lieut. Irons, I have since my last "report," completed ninety-two meteorological charts, for the months of January, February and March, 1844. These are the months corresponding to those of my first report for 1843.

In that report I ventured to draw from the documents then collected the following twenty generalizations:—

1st.—The rain and snow storms, and even the moderate rains and snows, travel from the west towards the east, in the United States, during the months of January, February and March, which are the only months yet investigated.

2d.—The storms are accompanied with a depression of the barometer near the central line of the storm.

3d.—This central line of minimum pressure is generally of great length from north to south, and moves sideforemost towards the east.

4th.—This line is sometimes nearly straight, but generally curved, and most frequently with its convex side towards the east.

5th.—The velocity of this line is such, that it travels from the Mississippi to the Connecticut river in about twenty-four hours; and from the Connecticut to St. John's, Newfoundland, in nearly the same time, or about thirty-six miles an hour.

6th.—When the barometer falls suddenly in the western part of New England, it rises at the same time in the valley of the Mississippi, and also at St. John's Newfoundland.

7th.—In great storms, the wind, for several hundred miles on both sides of the line of minimum pressure, blows towards that line, directly or obliquely.

8th.—The force of the wind is in proportion to the suddenness and greatness of the barometric depression.

9th.—In all the great and sudden depressions of the barometer, there is much rain or snow; and in all sudden great rains or snows, there is a great fluctuation of the barometer.

10th.—Many storms are of great and unknown length from the north to the south, reaching beyond our observers on the Gulf of Mexico and on the northern lakes, while their east and

west diameter is comparatively small. The storms, therefore, move sideforemost.

11th.—Most storms commence in the "far west," beyond our most western observers; but some commence in the United States.

12th.—When a storm commences in the United States, the line of minimum pressure does not come from the "far west," but commences with the storm and travels with it towards the east.

13th.—There is generally a lull of wind at the line of minimum pressure, and sometimes a calm.

14th.—When the wind changes to the west, the barometer generally begins to rise.

15th.—There is generally but little wind near the line of maximum pressure, and on each side of that line the winds are irregular, but tend outwards from that line.

16th.—The fluctuations of the barometer are generally greater in the northern than in the southern parts of the United States.

17th.—The fluctuations of the barometer are generally greater in the eastern than in the western parts of the United States.

18th.—In the northern parts of the United States the wind, in great storms, generally sets in from the north of east, and terminates from the north of west.

19th.—In the southern parts of the United States, the wind generally sets in from the south of east, and terminates from the south of west.

20th.—During the passage of storms, the wind generally changes from the eastward to the westward by the south, especially in the southern parts of the United States.

The great uniformity of the phenomena accompanying the storms of the first three months of the year 1843, emboldened me to draw the above generalizations; observing, at the same time, "how far these generalizations will apply to other months of the same year, or to the same months of different years, remains to be seen by future investigations."

I have the pleasure now to state, that the phenomena exhibited in the charts herewith communicated so entirely correspond with the above generalizations, that there seems to be no necessity to make any change in them. It is therefore expected that future observations will establish them as laws, applying to these, and perhaps to the other winter months.

In the summer months, however, there is one great feature of the storms of the winter months wanting; that is, their great size. In the summer the rains are quite local; and though, like the winter storms, each rain appears to progress towards the east from the place of beginning, yet, from want of size and continuity over a great space, they are not so easily traced.

I shall, therefore, not attempt to deduce any generalizations for the summer storms, until all the journals which may be received for several years shall have been collated.

In conclusion, I will venture to deduce two other generalizations, as applicable to the storms of January, February and March.

21st.—The northern end of the line of barometric minimum generally moves faster towards the east than the southern end.

22d.—The maxima and minima of the thermometer move towards the east with the storms.

All which is respectfully submitted.

JAMES P. ESPY.

—*Boston Med. and Surg. Jour.*

MEDICAL CONGRESS AT PARIS.

(From the Medical Times.)

The Congress adopted, at its first meetings, the following resolutions by its committees, and discussed in the general assemblies, to be laid before the Minister of Public Instruction, as the expressions of the general wishes of the profession:—

Faculties of Medicine.

1. That a chair of the history of medicine be created at the Faculty of Paris, and one of morbid anatomy at the Faculty of Montpellier.

2. That official courses of lectures be delivered at the special hospitals of Paris, i.e., Children's Hospital, St. Louis, &c.

3. That a preparatory School of Medicine be created in Corsica.

4. That all persons legally belonging to the medical profession shall enjoy the right of teaching the various branches of medico-

chirurgical science, and that right shall be distinctly specified in a particular clause of the new law.

5. That as much latitude as possible shall be granted to the liberty of teaching, and government shall pledge itself to place in Paris, and in the principal cities of France, amphitheatres, subjects, and other things necessary for tuition, at the disposal of all the members of the profession, to whom it may thus lend efficient assistance.

6. Free instruction shall not interfere with official instruction, the former diffusing private doctrines and opinions only, and conferring no university privileges.

7. The new law shall expressly sanction free instruction, so useful to humanity and to science; the legislation having hitherto occasionally granted the right of free instruction in its broadest sense, and occasionally interfered with it by throwing insurmountable obstacles in its way.

8. That the Congress do express a desire that the Minister of the Interior and of Public instruction be requested to insert a special clause, with the view of giving full satisfaction to the necessities of free clinical instruction in Paris, and in the departments.

9. The election of professors in the faculties of medicine and in the special schools of pharmacy, and veterinary medicine, shall take place by public competition.

10. At such concours, the board of electors shall be composed of professors of the faculty, members of the Royal Academy of Medicine, and (M. D's) who shall have practised at least for the space of five years; each of these sections shall form one-third of the total number of members of the board.

11. The board of electors in the departments shall be composed of an uneven number of professors of the local faculties, and of persons elected by ballot by the faculties and schools, amongst the members of pre-existing societies of medicine and pharmacy, and in default of these, amongst the practising physicians and apothecaries of the city.

12. The functions of professor shall cease at the age of sixty-five; after that age the professors shall become "honorary," and participate in the councils, and administration of the faculties and schools, without being admitted to share in the examinations. They shall continue to receive their salary up to the age of seventy, when they shall be superannuated.

13. The above clauses also refer to professors of secondary schools.

14. That the institution of "Professeurs agrégés" be preserved on its present footing.

15. On entering a secondary school, pupils shall present the degree of bachelor of letters. Besides this degree, in the faculties, after one year's study, the degree of bachelor of sciences shall be required of them.

16. The pupils shall be classed according to the years of study.

17. At the end of each year the pupils shall pass an examination of probation.

18. Government shall be requested to open establishments to receive in-door pupils.

19. The term of medical study shall be of five years' duration at least; and the pupils shall furnish proof of having, during two years, performed practical service in the hospitals.

20. In the examination of the inaugural thesis, the candidate shall be interrogated by an equal number of professors of the faculty and of medical practitioners chosen by the medical colleges of the city.

The following are the chief resolutions taken with regard to pharmacy:—

1. That the degree of bachelor of letters shall be required before the beginning of the study of pharmacy. The diploma of bachelor of sciences shall be required after the year 1850. The faculties of pharmacy shall confer three degrees—bachelor, licentiate, and doctor in pharmacy; the latter only giving the right to practise pharmacy. The course of studies shall last seven years, during four of which the pupil shall be apprenticed to an apothecary.

2. The codex shall be submitted to a complete revision, a new edition shall be published every ten years, and an appendix or fasciculus shall be printed every year.

3. The codex shall be drawn up by a permanent committee, formed in equal numbers of professors of the school of pharmacy, faculty of medicine, veterinary medicine, and practising apothecaries.

4. A legal tariff, fixing the price of medicines, in the present condition of pharmacy in France, is useful, possible, and necessary.

Several important questions still remain to be discussed. The illegal practice of medicine; the expediency of preserving two orders of practitioners; the possibility of putting some check on the advertising mania of quacks; the disciplinary councils, and the institution of midwives, will be, during the course of next week, submitted to discussion in the Congress; we shall forward to the readers of the *Medical Times* the resolutions adopted by that assembly.

The session of the Medical Congress has now closed, and the following resolutions, added to those contained in our last communication, from the body of the modifications in medical instruction and medical practice, proposed by Congress to the Legislature:—

Resolved,—

1. That after the new law shall have been promulgated, only one medical degree—that of doctor in medicine—shall be conferred in France.

2. That the "*officier de santé*" having practised in that capacity for the space of five years, shall be empowered, by a special clause to receive the diploma of M. D. after a practical examination in medicine and surgery.

3. That the illegal practice of medicine shall be well defined in the new law, and repressed by severe penalties.

4. That a medical college be erected in every district, comprising all the physicians resident therein.

5. Every year each medical college shall elect by ballot a medical council; that council shall be empowered to inflict five degrees of disciplinary penalties:—1. Admonition (in private); 2. Reprimand (in council); 3. Censure (in public); 4. Temporary erasure from the list of practitioners; 5. Definitive erasure from that list.

6. It shall be the duty of medical councils to direct the attention of the attorneys-general towards persons illegally practising medicine.

7. That all foreign physicians desirous of practising medicine in France, shall be required to obtain the diploma of M. D. in a French university, and to pass on the same footing as Frenchmen—the six examinations and the thesis.

8. Political refugees shall be admitted to examination without expense.

9. That a certain number of "bourses" in the faculties of medicine shall be granted by public concours to pupils having studied two years.

10. All public notices, or advertisements in newspapers, pamphlets, or prospectuses, announcing to the public the arrival of a physician, his direction, a special medical treatment, or the sale of any medicinal preparation whatever, are forbidden, and their authors shall be punished by severe penalties.

11. The simultaneous practice of medicine and pharmacy is strictly prohibited.

Such are the principal resolutions adopted by the Medical Congress—resolutions which will doubtless be taken into very serious consideration by the Chamber of Deputies and by Government. M. Salvandy, the minister of public instruction, attended two of the meetings, and expressed his intention of giving, as far as lay in his power, every satisfaction to the desires of the profession.

The 7th resolution may appear illiberal in its tendencies, but the protection of the public and of the interests of the profession demanded imperatively some such measure, and it was carried under the influence of the following remarks from Drs. Gorée and Malgaigne:—

Dr. Gorée, delegate of the Boulogne Physicians.—The city of Boulogne contains seventeen French doctors and twenty-one foreign physicians. Six of these twenty-one, only, have obtained a legal right to practice medicine—four having been authorised by royal ordonnance, and two having passed the examination of "*officier de santé*." The fifteen others practice medicine illegally, and the law is powerless against this abuse.

Dr. Malgaigne.—I here see two sorts of foreign physicians, gentlemen. There are many great and learned men, who enjoy a well earned reputation of talent and science; these men honour any university they belong to, and your examinations will not frighten them away. But these men form a very small minority amongst the persons who practice medicine away from their

homes. I will mention to you the opinion of a man whom all acknowledged to be competent in such matters, M. Orfila, the dean of the faculty of Paris, asserts it is impossible to form an idea of the ignorance of the foreigners who demand authorisation to practice medicine in France; out of one hundred, five at most could pass an examination with credit.

Shall I speak of some German universities—of that of Giessen, for instance—whose commercial agent, one Mr. Bond, advertised for months in the medical and political papers the £50 degrees? Shall I say that the faculty of Wurtzbourg has ceased to exist, in consequence of the same abuses? Is it necessary for me to add that the Marbourg forwards its diplomas, by post or by waggon, to whoever asks for them, even to women? and we all have seen Madame Boivin, who had never put her foot within the gates of Marbourg, displaying the diploma of M. D., purchased from that university. Professor Forget, of Strasbourg, represents at this Congress the physicians of the department du Basrhin, who loudly call for your assistance against quacks from the other side of the Rhine—a new invasion of barbarians, whose numbers overpower the unprotected legal practitioners. As to political refugees, give them a home, give them assistance of every kind, but do not give them the lives of your fellow-creatures; that you have no right to do. What we positively demand from Congress is, to oblige foreigners desirous of practising medicine in France to furnish the same proofs of capacity which are required from Frenchmen; we demand it in the name of common sense, of public health, which you are called upon to protect, and of the dignity of our profession, which you are bound to uphold.

DAN. M'CARTHY, D. M. P.

President of the Parisian Medical Society, late Interne of the Hospitals of Paris.

FACULTY OF MEDICINE, PARIS.

Faculty of Medicine; First Meeting of the Winter Session, November 3, 1845.—The opening lecture was delivered by the professor of hygiene, M. Roger Collard. It is customary in this speech to sketch the life and appreciate the writings of those professors whom the faculty has lost in the course of the preceding year. Professor Breschet was the theme of M. R. Collard's discourse, from which we extract the following passages:—

"The life of a professor is in his works; in them we seek, not the pretext for a vain display of oratory, or the matter of a panegyric, but fruitful examples, and lessons extracted from a retrospective view of the instructions he has imparted. The first work of our late colleague, which I will notice, is the remarkable thesis to which he was indebted for his nomination at the concours for the direction of the school of anatomy, in 1819. This thesis contains. 1. The description of the venous circulation of the spinal cord—the first accurate description which had yet been made, not only of the anatomical disposition of its vascular system, but the general mode by which the blood is circulated through the Rachi-dian veins. 2. A memoir on the formation of the callus of fractured bone; the theories contained in it are still universally adopted. 3. A paper on femoral hernia, containing the first description of the anomalous origin of the obturator and epigastric arteries.

"Time and space would fail me, gentlemen, were I to attempt to give you even a rapid and incomplete sketch of Breschet's researches on embryology—his description of the ear, of the skin—his experiments on animal heat, &c.

"If we now consider the general tendency of Breschet's works, we find them all distinguished by this special character, that whatever might be the subject towards which he directed his sagacious inquiry, he always laboured to demonstrate some physiological view strongly impressed upon his mind. It seems to have been his object—an object which he often attained—to establish the connecting links of physiology between the various parts of medicine; thus each part borrowing from the others an assistance which it reciprocally gives them, no *partial* truth can be elicited, no minute discovery be made, but that sheds a vivid light upon all branches of knowledge.

"Not only did Breschet translate, or cause to be translated, many foreign works, not only did he produce before the broad daylight of our schools, and protect with the respected authority of his name, opinions which their obscure origin might have long kept in the background; but what is a remarkable circumstance, he improved erudition by the force of invention, never touching the labours of another without enlarging and increasing tenfold the importance of the borrowed subject; and by the peculiar felicity

with which he knew how to endow a thought foreign to himself with the irradiations of his original mind. Breschet, whose least publications have attracted the attention of Europe, ever escaped the imputation of plagiarism, in an age in which the accusation is so frequent.

"It has been truly said of Breschet, that he represented foreign science at home, and French science abroad; * * * and it is not, gentlemen, a trifling service rendered to society, thus to connect men, born in distant lands, in one scientific bond of union! Doubtless, in the world of knowledge nothing is lost, and humanity can wait; but the life of a man is short, and consumed in the toilsome pursuits of discoveries which have become popular at a short distance from the home of his birth. Let us, therefore, rejoice for the present time, and congratulate ourself for future ages, when we find that men born in different climes now progress hand in hand in the broad path of science, communicating to each other their discoveries, and for the permanent benefit of the human race, mutually enriching themselves by the constant interchange of the treasures of intellect.

"Before talent, before even genius, it is my object to hold up to your honour and reverence the love of science; recollect that those men only are destined to live in the memories of their fellow-creatures, who employ their labours in forwarding the interests of the human mind.

"Gentlemen, you who now listen to my words, to you I turn. The debasement of our profession is every day deplored; protecting laws are loudly called for, and increased respect demanded for the medical body. Remember that in our age, respect is granted only to individuals; it can no longer be written in the legislator's code, nor enacted by orders in council. If you wish to be honoured, shew yourselves worthy of the vocation you have accepted, by bestowing all your energies on those studies by which you expect, at a future day, to rank above other men. In your hands are placed the easy means of acquiring knowledge; your masters are ardently devoted to the performance of the task which their country and their talents have imposed upon them. Rival faculties surround you, supplying you with the most varied resources of science; libraries, museums, amphitheatres, are open to you on all sides. Pupils of the Faculty of Paris, aid our efforts by your own, your country has a right to expect much from you, and, we pledge ourselves, that you will not frustrate its hopes."—*Dublin Medical Press.*

Exhumation of the Remains of Bichat.—M. Rigal, secretary of the Medical Congress, read to the Academy the minutes of the proceedings of the delegates commissioned by the Congress, to superintend the removal of the remains of Bichat to the cemetery of Père la Chaise. The body had been interred in the year 1803, in the burial ground at present occupied by the Anatomical School of Clamart.* The bones were found in a perfect state of preservation, and the head, which had remained in the possession of Professor Reux, was restored and placed with the other relics in an oak coffin. A funeral service was celebrated at the church of Notre Dame, and a cortège of upwards of two thousand persons followed in procession to the cemetery of Père la Chaise, where several speeches were pronounced by Professors Serres, Roux, Rigal, &c., recalling the numerous virtues of Bichat, and the many services rendered by him to science and to humanity. This ceremony, performed in memory of the great anatomist, closes and commemorates the labours of the Medical Congress of 1845, the first attempt in France to obtain a general meeting of the members of the profession.

PENCILINGS OF EMINENT MEDICAL MEN.

DR. JAMES JOHNSON.

"O misero frater adempte. mihi!
Omnia tecum una perierunt gaudia nostra,
Quæ tuus in vita, dulcis alebat amor,
Tu meæ, tu moriens fregisti commoda, frater,
'Tecum una tota est nostra sepulta anima.'"

CATULLUS.

After a long, at first rugged and laborious, and at last successful life, Dr. James Johnson has become a tenant of the still and peaceful grave. He died at Brighton on the 10th of October last.

* The exhumation took place on Sunday, Nov. 16, 1845, in presence of a numerous meeting of professors and physicians.

There is on some occasions a mournful gratification in descendant on departed worth; but in the present instance the loss, not only to a bereaved family, but to the public, is so irreparable that our own regrets render it impossible to note his dissolution without those feelings of unmitigated regret to which no language can give utterance. We had the good fortune to be intimately acquainted with Dr. Johnson for many years, and though tempted to try to pen a fitting tribute to his memory, feel but too certain that we must fail to do it justice. In noticing his death, therefore, we shall endeavour to confine ourselves to a simple narrative of the principal events of his life; and if some of his more intimate friends may be aware of the facts relating to him that we are in possession of, they must pardon us the recital on the score of those less fortunate. The history, simple though it be, is fraught with instruction—an incentive to the cultivation of industry, honour, and probity, and a practical lesson that, in the day of trial, when heart and flesh faileth,

“That man hath perfect blessedness
Who walketh not astray.”

Dr. Johnson was born in the month of February, 1777, in the parish of Ballinderry, on the banks of Lough Neagh, in the county of Derry, Ireland. He was the youngest son of his parents, and survived all his father's family. His father and mother died when he was of tender age. His father cultivated a small farm, which had been long in the possession of his family, and both his parents were highly respected. James went, at the age of six years, to the village school of Ballinderry, which was kept by the brother of the parish priest; but he was himself, as were his family, Protestants. He left school before he had reached the age of fifteen, and it may be said that at that period his regular course of scholastic instruction terminated, so that he became, to all intents and purposes, a *self-taught* man, and, as the sequel will show, one of no ordinary acquirements. He made great progress at school; was almost always at the head of his class; wretched when he was not so, and he would sit up till midnight studying until he had succeeded in regaining what he seemed to think his proper place, whenever he had lost it. Soon after this he left his native country, and in the course of his life travelled a great deal. In his travels he was an acute and constant observer, always taking credit to himself for studying the character of man, with which he became as well acquainted as perhaps any individual of his day. At an early age he entertained a strong desire to study medicine, but without money, and without friends, he met with many obstacles, and had to surmount innumerable difficulties before he had acquired that degree of information which qualified him to pass his examination, and become a medical man. By frugality and industry he acquired sufficient to enable him to effect his apprenticeship. He employed all his leisure time in reading; gained his medical information piecemeal, and from being an assistant to an apothecary in London, was enabled to attend such lectures and dissections as qualified him for the situation as a surgeon's mate in the navy. Having obtained that situation he became an immediate favourite with the surgeon and captain of his ship. They admired his abilities, his attention to his duties, and his thirst for knowledge, and permitted him to steal away from the vessel that he might expend the pay he had saved in attending further lectures, practising dissections, and procuring additional information. In this way he followed up his even, unbending way until he was competent to become, and actually did become, a full surgeon in H. M. navy. He was for some time on the coast of Egypt, whence he returned to London invalided. As soon as his health was a little restored he hastened again into the dissecting-room, and there, as his teacher, Mr. Wilson, said of him, he *lived*. Having in this way, by snatches, obtained his professional education, he spent many years in the naval service, and in 1813 took his degree of M.D. at Aberdeen. Afterwards he studied for a short time in Paris, and became a Licentiate of the London College of Physicians in 1820. He was forty-one years of age when he commenced his career as a physician in town; was then married, and had several children, with barely sufficient, as might well be expected, to supply them with the necessaries of life. But he relied on his own energy of character, and, confident in himself, he made a courageous *debut*. He never lectured publicly, but for some time after he came to reside in London, he received private pupils, to whom he delivered private lectures on medicine.

Remembering that he was self-educated, and how limited were his opportunities, the extent of his writings, and the literary at-

tainments shown in them, are surprising. In the first place, he published, in 1803, a graphic account of his voyages and observations in the East, called the “*Oriental Voyager*,” a book full of interesting information. Secondly, he published, in 1812, a book “*On the Diseases of Tropical Climate s*,” which has gone through five large editions, and is, to this day, regarded as the medical text-book in the East Indies. Extraordinary as it may appear, under the untoward circumstances of his youth, it is indisputable that the materials for this valuable book were collected, and the book itself composed by him when he was under twenty-six years of age. It has been universally held to be distinguished for its copiousness, physiological accuracy, and practical worth. Thirdly, he published many papers in the *New Medical and Physical Journal*, of which he was one of the editors. Fourthly, he himself started the *Medico-Chirurgical Review*; a work conducted with great energy, and usefulness to the profession, for many years, and every line in which he wrote with his own hand, and more frequently than otherwise at midnight, after 1 he had discharged the laborious duties of the day. Fifthly, he published, in 1826, an “*Essay on Indigestion*.” This has been the most popular work on dyspepsia ever written. It went through four full editions in nine months, and is now to be had in its ninth. The doctor was himself a martyr to dyspepsia, and it is believed by his family and those who knew him, that he has described in that book no more than he personally suffered. Notwithstanding he was a man of great moral courage, yet he was of a highly nervous temperament; and to such a degree was he the subject of hypochondriacal depression, that, on one occasion, when every guinea was essential to him, he left London in the middle of the season and retired to Margate, as he said, to die. The merciful hand of Providence, however, invigorated him—restored him again to health, and spared him for many years afterwards to be a blessing to his generation. The appearance of the work on indigestion spread his reputation in every direction, brought him into full practice, and at once raised him to independence. Sixthly, he wrote “*Change of Air, or the Pursuit of Health*,” a work dashed off with great spirit and vivacity, and exhibiting all the peculiarities of his style. He, himself (agreeing with all others who had read it), thought highly of this little essay, which has gone through four editions. Seventhly, he published, in 1833, “*The Recess, or Autumnal Relaxations in the Highlands and Lowlands*,” presenting a lively sketch of what he saw and experienced in Scotland, and full of amusing observations and anecdotes. Eighthly, in 1836, he published “*The Economy of Health*.” This has gone through three editions, and is another of those popular works of which he was himself peculiarly fond, in which he was extremely happy as a writer, and the composition of which afforded him more pleasure than any earthly amusement. Ninthly, “*A Tour in Ireland*,” published in 1843, which is full, as are all his writings, of acute original and interesting observations, made and pronounced irrespectively of all parties and persons, and founded altogether by his own convictions. Besides these, he was the author of numerous papers in the *Medico-Chirurgical Review*.

He was long a member of the Medico-Chirurgical and Westminster Medical Societies. Whenever he could so manage his arrangements as to admit of time for it, he attended them. He was not an eloquent speaker, but what he said was always to the point, and remarkable for its straightforward practical character. It carried with it intrinsic evidence of sincerity and truth, and he was always listened to with attention and respect. Though not a fluent debater, he had a happy knack of saying a humorous and clever thing, not infrequently a pungent one. He was a man of strong natural talent—of a patient and reflective mind—with a ready and lively imagination, and a faculty which, if not wit of a high order, was not very far removed from it. At times, he was disposed to take up party views, but that disposition was kept in check by the soundness of his judgment, and by his long experience of the world. There was also in him, at times, what has been observed in many men of the kindest hearts—an occasional testiness of manner, the result, no doubt, of incessant occupation, and the nervousness occasioned by it. None could regret this little failing more than he did himself, nor could any one more studiously have contrived to make the *amende* by some subsequent act of generosity. It would be difficult, indeed, to exaggerate the amiability of his disposition, or his liberality of feeling. He was an affectionate husband, a good father, kind to his children, judiciously indulgent to them, and loved by them all in return. He was a warm and an attached friend, generous to his patients and

to others to a fault. If he had but an idea that any one could ill afford to pay his fee, nothing would induce him to accept it. However gratuitous his professional services might be, his attendance was unremitting, and his solicitude as great, as if his remuneration was of the most princely character. Perhaps no medical practitioner ever secured the affections of his patients, more readily and more lastingly than his qualities enabled him to do; and those alone who have seen can form some notion of the degree of grief, that now pervades the numerous class, who have been partakers of his healing and fatherly assistance.

His published works, and the events of his life, testify that he must have possessed a capacious mind. No man of ordinary powers, under the circumstances in which he was placed, could have acquired the professional knowledge which he did; nor could such a one ever have attained that eminence in the profession at which he arrived—acknowledged, as he was, to have been a practitioner of first-rate ability. Whatever he undertook to do, he did, without turning to the right or to the left. *Industry! industry!* was his motto, and it was certainly his practice. When conducting his "Medico-Chirurgical Review," he was never known to go to bed, however fatigued, or even ill, until he had written his appointed portion for the day. When he started on a tour, the parts which he should have written, during its continuance, had been written before hand; and even these tours were but rounds of incessant activity. He never, while engaged in them, retired to rest before he had committed to paper what he had seen or what had occurred to him throughout the day. His return home was a return to work as before, and to compose, amidst his laborious practice one of his amusing essays. At the very same time, he would be revising his book "On the Diseases of Tropical Climates," recomposing editions of his former works, and reading extensively. The secret means by which he accomplished so much was—punctuality in all things—never putting off till the morrow, what he could do to-day. Another peculiar trait in his character was, his abhorrence of debt. Even at the time when he was in his greatest pecuniary difficulties, it is believed that he never borrowed a shilling. Throughout his life he lived within his means, and never owed a farthing. He paid for every thing as he got it; or, if the occasion admitted of it, even in advance; and at his death no individual could claim a sixpence against his estate, which could by possibility have been paid before he expired. He had a contempt for show and parade, and carried that feeling to eccentricity. He dressed plainly, and lived in a very private and unostentatious style. Generally speaking, self-educated men become dogmatical and vain, but he was the reverse of both. Humility stamped him for her own. He never affected to be what he was not; seldom did he even assume the appearances which his means would have justified; but still he was, in manner and in mind, a gentleman. He had a fine sense of moral rectitude. He viewed delinquencies in their right light, however glossed over by meretricious circumstances; and yet no one could have been more forgiving than he was, when the offence was committed against himself. He was a religious and a just man; and, though a sincere Christian, his religious sentiments were of the most tolerant description. *Charity* to all men was the essence of his creed, and his precepts and his practice never disagreed.

Notwithstanding his all but blameable liberality, he derived from his practice for many years past, a large income, and but for his generosity, that income might have been doubled. At the time of his death, his yearly savings were greater than they had ever been; and had he been spared for a few years more, his accumulated earnings must have been considerable. He spared no expense in the education of his children; qualified all his sons for the liberal professions, supported them by adequate allowances, and died, leaving to his widow comparative affluence, and to his children sufficient to sustain, but not supersede industry.

Dr. Johnson lived in Suffolk-place, Pall-mall, where for many years he carried on a very extensive practice as a physician. We say Dr. Johnson, because he himself preferred so to spell his name. The name of his father, however, and of himself in boyhood, was *Johnston*; but at an early age, from some whim, probably a philological preference for the more rhythmical spelling of what originally was the same name, he dropped the "t," and ever afterwards signed his name *Johnson*. Whether his family may now resume the original name, or not, we do not know. He was about the middle height, rather under than over that standard; muscular, though of a spare habit; very active; of a fresh and ruddy complexion; open and frank countenance, with a remarkably full,

penetrating, and intelligent eye; an ample forehead, and a general expression of mildness and goodness of heart. Till very lately his figure was perfectly upright, but latterly he began to stoop. His hair, which he generally wore very short, was dark and thick, and had scarcely begun to whiten from the frost of sixty-eight winters. What is rather remarkable was that he never lost a tooth, nor even knew practically what toothache was, until within a short time previous to his death, when he was occasionally heard jocosely to say he feared he should be under the necessity of parting with one of his old friends. He was abstemious, but not perurious in his mode of living; simple and unaffected in his manners; affable, and on all occasions easy of access. Although, from its interference with his studious habits, he was averse to society, yet, when in it, he was cheerful, amusing, full of anecdote, and few persons could be for any length of time in his company without feeling that his mind was not only a store-house of varied information, but that his character was that of unadulterated kindness and truthfulness. His wife was a lady, amiable in disposition, and unobtrusive in her character, with whom, in the bosom of an affectionate family, he enjoyed much domestic happiness. By his marriage he had five sons and one daughter. His eldest son, Henry James Johnson, now occupies his late father's house. He is a consulting-surgeon, senior assistant-surgeon at St. George's Hospital, where he lectures on anatomy, and is a gentleman of sound professional knowledge, of kind and easy manners, the inheritor of many of his father's qualities, and destined, we trust, to leave unsullied his father's name. His second son, William John, Fellow of Caius College, Cambridge, is at the bar; his third, Thomas Edward, is a solicitor; his fourth, Charles Stewart, died when young, which gave a perceptible shock to his parent; and his fifth, Athol Wood, is now house-surgeon at St. George's Hospital.

Until about eighteen months ago, Dr. James Johnson enjoyed very tolerable health. About that time he began to decline, and he was induced, for the sake of change and relaxation, to take a residence at the beautiful village of Norwood, at a distance of about six or seven miles from town. He went there, and visited London daily, but did not derive from it the benefit it had been hoped he would have done. After two months' trial, he returned to his house in Suffolk-place. In the hope of sea-air being beneficial to him, he resolved on going to Brighton for a month or two, and intended to visit London occasionally. He accordingly repaired there, but, from his long habits of activity, he was unable to remain at Brighton a single day without visiting London. For about the first fortnight he came to town daily, returning to Brighton in the evenings. Soon after he went to Brighton he was attacked with diarrhoea, which continued to afflict him until he expired. On Saturday, the 4th of October, he was in London as usual; saw his patients, transacted business, and returned in the evening. In the course of his journey down he was attacked with a rigor, and when he arrived at Brighton he said to his wife, that unless he could perspire freely he should never recover. Next morning he was alarmingly ill, and he continued, without a cessation of his dangerous symptoms, until Friday following, the 10th instant, when he resigned his soul into the hands of his Maker. On all former occasions of his illness, from his nervous temperament, he was much liable to despondency, even when his ailments were only trifling; but in this instance he felt differently: he was immediately aware of his situation. He spoke of his approaching end with the greatest calmness, and those who witnessed his last moments say, that in no case could there be a more perfect picture of manly endurance and Christian resignation to the will of God, than he exhibited on his death-bed. He spoke composedly and tenderly to his wife and children, who surrounded his couch. While he was yet able to articulate, his language told that his thoughts were even then anxiously employed about their little personal wants. The simplicity and kindness of his nature were manifested to the last; and care for others, none for himself, was his final trait upon earth. If there ever was a just and good man it was James Johnson: and whatever his acquirements, his talents, or his wealth, he has left to his sons his best legacy in the recollection of his worth.—*Medical Times*.

MEDICAL PRACTITIONERS IN LONDON.

It appears from Mr. Mitchell's Medical Directory that the number of medical practitioners in London is 2,157; of these 330 are physicians; 245 surgeons; and 1,582 general practitioners.

HISTORICAL ACCOUNT OF THE POTATO DISEASE.

The epidemic observed amongst the potatoes is not a new malady. In 1816, under the influence of a cold and damp season, they were affected in the same manner as at present, to such an extent as to cause the destruction of a considerable part of the crop in France; and every successive year, isolated cases of the same alteration are generally met with. The present epidemic is said to have begun in Ireland, in 1842, whence it spread to England, Holland, Belgium, Germany, Piedmont, Savoy, and France, preserving in all these countries the same specific characters; and thereby indicating that it is due to the deleterious influence of one general cause, viz., the abundant rains and the low temperature which have prevailed during the last three summers. The visitation has afflicted the driest as well as the most humid soils, the highest grounds as well as the lowest, and in the neighbourhood of fields wherein the crop was utterly destroyed, other fields, placed in apparently identical condition, have enjoyed an inexplicable immunity; in the same field some potatoes have been spared, nay, in the same root diseased tubers are found in immediate contact with healthy ones, although they derived their nutriment from one common stalk, and would seem to have been liable to the same disorders. It is from the 10th to the 15th of August of the present year, that agriculturists agree in placing the origin of the complaint. At that period, under the influence of a sudden change of temperature, the vegetation was arrested, the soil remaining *sans amour*, according to the picturesque and poetical expression of the French husbandman. The *early potatoes*—the pink and the red kidney—have suffered less, whereas, the yellow and the late kidney variety (*vitalotte*) have been almost altogether destroyed.

Anatomical Alterations.—We may refer the anatomical changes to two heads:—1st structural changes in the cellular-vascular texture of the potato; 2d, modifications undergone by the *fecula*.

1. On dividing the potato, the diseased portions are marked by their rusty colour; their *odour* is characteristic, and betrays the cryptogamic formations. The tissue is softened, and more easily dissociated than that of the healthy parts which are white and of a firm consistency. According to Mr. Payen, the microscope shows, in thin slices of the infected potato, a liquid of a light brown colour, occupying the inter-cellular spaces; on the walls of the cells are noticed darker granulations, which may also be seen floating in the brown fluid above mentioned. In some potatoes the cortical portion alone has suffered; in others, by far the smaller number, the central part. When the alteration is in an advanced stage, the texture is semi-liquid, and myriads of animalculi can be detected. Their length is 1-100th of a millim.—their breadth 1-1000th of a millim, and they are endowed with very rapid movements. Minute cryptogamic productions, visible only to the microscope, are also seen, being generally puccinæ with two cavities, and some belonging to the variety of the fungus described by Martius under the name of *Fusisporium Solani*. When the decay is in its last period, acari, and insects of the order rhabditis, are found in the superficial ulcers of the tuber.

2. The condition of the *fecula* is quite healthy in most potatoes—the grains remaining perfect in the centre of indurated diseased cells; but the flour is less abundant than in healthy tubers, and much more difficult of separation. The diseased potatoes have yielded to M. Payen, 14 per cent. of their weight of *fecula*—healthy ones furnishing 18 per cent. This diminution in the amount of *fecula* arises from two causes:—1st. The absence of secretion from the cells in late potatoes; 2d. Putrefaction in those tubers which are in an advanced state of decay. When the changes are very considerable, the potatoes are an alkaline of reaction.

Three theories are brought forward to account for the disorder:—1st. The development of animalculæ (Gruby); 2d. Parasitic vegetable formations (Payen, Morren, Montagne, Decaisne); 3d. Stagnation of the fluids of nutrition (Philippar, Gerard, Decerfz, Bouchardat). This last opinion seems to us the only correct one; it accounts readily for all the morbid appearances, and may be supported by the same chain of reasoning by which we explain in the human system the formation of dry gangrene of the extremities, or softening of the substance of the brain from vascular disease, thus:—The circulation of the vital fluids of the potato begin arrested by a sudden change in the temperature, the secreting cells deprived of nutriment have ceased to live, and consequently *secrete fecula*. In early potatoes, the flour being already form-

ed at the period of invasion of the malady, has undergone no alteration, but is more difficult of extraction from being surrounded with dead, indurated cellular walls. In late potatoes, on the contrary, the cells being rendered incapable of secretion, no *fecula* is formed; in both, decomposition following gangrene; vegetable and animal parasites arise and complete the work of destruction, but they can no more be considered to have caused the disorder than the worms met on a dead body can be looked upon as having occasioned death.

Can the Diseased Potatoes be used as Articles of Food without Danger?—The result obtained from minute and extensive inquiry on this head point to the following conclusions:—1st. The *fecula* met with in diseased potatoes is, to all intents and purposes, in a healthy condition, though more difficult to extract than from the healthy tubers; 2d. The diseased potato is injurious to health only by its indigestible properties; 3d. The disorder being due to unfavourable atmospheric conditions, its further propagation is not to be apprehended.—*Proceedings of the French Institute. From Medical Times, Nov. 1845.*

British American Journal.

MONTREAL, JANUARY 15TH, 1845.

BILLS OF MORTALITY.

This number will be found to contain the deaths in this city, condensed in tabular form from the detailed statements made by the Clerks of the different burial grounds, to the Chief of Police, who has been invested by the Corporation with instructions to carry their lately enacted By-Law, having this object in view, into execution. A simple inspection of the book from which this return has been deduced, will convince any one in the slightest degree acquainted with these matters, that the system at present pursued, fails in attaining the object sought for. It is not only the knowledge of the number of deaths that is valuable, but also of the diseases which have tended to a fatal issue, and some other method should be devised to secure this end than the one adopted, which by no means answers the purpose. The truth of this observation will be manifest, when we cast our eyes over some of the items in the table. Thus, the number of deaths from "Consumption," under one year of age is recorded as 11, and between one and three as 6. May we not doubt the correctness of this statement, or, at least, for the purposes of accuracy, might we not, with propriety, ask what "Consumption" here means? or whether the term may not here include other diseases besides Phthisis, possessing probably some points of similarity, a matter of but little importance to any ordinary enquirer, but of prime consequence to the statistician. Again, under the head of "Inflammation," we find recorded 4 deaths. We ask for the seat of this "Inflammation?" Was it in the head, chest, or abdomen? Again, with reference to the number of deaths recorded as originating from "Fever," we find 18 under the age of 3, and 8 between the ages of 3 and 10. The most ordinary medical experience in this city will not hesitate to pronounce an error here; and we are moreover uninformed, admitting this return to have been made correctly,

of the particular type of the Fever, whether it was of a continued, typhoid, remittent or any other type. And lastly, the return under the head of Dropsy, permits of some suspicion as to its correctness.

In making these observations, our object is by no means, to convey the slightest disapprobation on the endeavours of our City Council to obtain the returns, of which the present one is the first, in fulness of detail. We feel perfectly persuaded that they have endeavoured to secure accuracy, and that it has been their wish to do so; but the question is, is the By-Law competent to the end? Judging from this specimen, its first result, we hesitate not to affirm that it is not; the By-Law itself is wanting in some proviso by which the name of the disease shall be accurately returned to the sextons. There is only one method of securing this desirable end, viz—by compelling the sextons to receive from the friends, a memorandum of the nature of the disease, certified by the medical attendants name, as his guarantee that the name of the disease is correctly returned to him. This method would necessarily extend the provisions of the By-Law over the medical profession of the city; but we feel thoroughly persuaded, that to secure an object of such moment as correct returns of the causes of mortality, no member of the Profession here would throw the slightest impediment in the way, but, on the contrary, would do all in his power to facilitate it.

If we may be permitted to judge, by the *names* of the diseases recorded in the volume from which our abstract has been made, of the sources whence the information, as to their nature has been derived, we can have no difficulty in assigning as the authorities, the friends themselves. For numerous reasons which it is unnecessary to particularize, but many of which will readily suggest themselves to our readers, we need do little more than observe, that information on such subjects, and from such sources cannot generally be depended upon, if accuracy is at all a matter of any importance. We would, therefore, strongly urge upon the civic authorities, whose object in this undertaking only can be accuracy as great as possible, to so far modify their By-Law, as to ensure this *desideratum*, in order that the results obtained may be assumed as data, against the value and correctness of which no suspicion may rest, when, at a future period, they may be taken as grounds of reasoning, for the purposes of statistics, life assurance, or, indeed, any other purpose to which they may be rendered susceptible of legitimate application.

MEASLES EPIDEMIC.

The measles have been epidemic in this city to an unusual extent, during the last two months. There are very few families indeed in the city which have escaped

the visitation. It appears to have been attended in some instances with a striking peculiarity,—the same individual in a family having been attacked a second time, within the period of a few weeks, the disease going through its premonitory and eruptive stages with most marked regularity. This appears to us to be a rather anomalous feature in the history of this disease, and one which seems to us to be well worth recording. Irritation of the mucous membrane of the large intestines, amounting almost to dysentery, has been not unfrequently observed, while the ordinary sequelæ have been frequent. 137 deaths from it have been recorded during the month of December, and 37 during the last three weeks of November. This mortality appears to have principally occurred among the lower orders; and may, irrespective of the injurious influence of crowded rooms, want of ventilation, and poor diet, be chiefly attributed to the baneful practice, which is common with this class, of exhibiting during the precursory stage, which is one of general constitutional irritation, if not excitement to say the least of it, hot stimulating drinks of a spirituous nature. It is a practice which cannot be too strongly reprobated. The cases which have fallen early under medical care, have, as a general rule, terminated very favourably. A few scattered cases of scarlatina and small-pox have been witnessed, but the chief cause of sickness has been the measles.

TORONTO GENERAL DISPENSARY.

We have received a Prospectus announcing the establishment of a Dispensary, under the above name, at Toronto. Institutions of this nature when properly conducted prove themselves valuable auxiliaries to the Hospitals and other recipients for the indigent sick, and we are happy to learn that this one is extensively patronized and likely to succeed beyond the most sanguine expectations of its projectors. Judging at this distance from the names of the gentlemen who are to compose its Medical Staff, viz., Drs. Hamilton, Hodder, Rankin, and Grasett, we doubt not the complete success of the charitable undertaking.

While on this subject, we may state, that in Kingston another Hospital has been established under the professional care of Dr. Yates, and that a second Eye and Ear Institution has sprung into existence in this city under the charge of Dr. Howard, its originator. With this multiplication of charitable institutions, the means of support to each respectively will become proportionably lessened, and their sphere of utility consequently diminished, we yet hope that such praiseworthy efforts will not pass unrewarded, and that the poor for whose benefit they are especially designed, will obtain all that good from them which they are calculated to afford.

NOTICE TO CORRESPONDENTS.

We acknowledge the receipt of communications from Dr. David, and Dr. Marsden, of Nicolet. The subject of one from the latter, will form the matter of a private letter, in the course of a few days, when leisure will permit. As our space is crowded, we have no room to acknowledge the receipt of letters from our country subscribers in an especial manner. To those, however, who have remitted the amount of their annual subscription, a receipt will be transmitted along with the present number, with our acknowledgements for their attention.

BOOKS, &c. RECEIVED

The New-York Medical and Surgical Reporter, No's 5, 6.
 The St. Louis Medical and Surgical Journal, No. 7.
 The Illinois Medical and Surgical Journal, No. 8.
 The Dublin Medical Press, No's 359, 360.
 Provincial Medical and Surgical Journal, No. 48.
 Boston Medical Journal, No. 21, 22, 23.
 American Journal of Insanity, Vol. 2, No. 3.
 Wiley and Putnam's Literary News Letter. January.
 Stockton's Dental Intelligence, Vol. 2, No. 2.
 American Journal of Dental Science. December.
 Armour and Ramsay's News Letter. January.
 The New-York Journal of Medicine. January, 1841.
 Southern Medical and Surgical Journal. January.
 American Journal of Science and Arts, January.
 Buffalo Medical Journal No. 8.
 Illinois do 9.

REPORT OF THE MONTREAL GENERAL HOSPITAL FOR NOVEMBER AND DECEMBER, 1845.

Dr. CRAWFORD, } Attending Medical Officers.
 Dr. HALL, }

Remained,	104	Discharged, Cured,	212
Admitted,	231	Died,	7
		Remaining,	116
Total treated, 335		Total,	335

IN-DOOR PATIENTS TREATED.

Belonging to Montreal,	188
Immigrants,	37
Seamen,	6
Total,	231
Males,	155
Females,	76
Total,	231

OUT-DOOR PATIENTS TREATED.

Belonging to Montreal,	354
Immigrants,	47
Total,	401
Males,	210
Females,	191
Total,	401

DISEASES AND ACCIDENTS.

Abscessus,	4	Hæmoptysis,	1
Ambustio,	1	Hamatensis,	2
Amnenorrhœa,	2	Hepatitis—sub acute,	3
Bronchitis,	5	Icterus,	6
Catarrhus Vesicæ,	1	Induratis Mamma,	1
Colica Pictonum,	1	Mania,	1
Constipatis,	1	Neuralgia,	1
Contusio,	8	Œdema Pulmona,	2
Conjunctivitis,	2	Ophthalmia,	2
Cynanche,	1	Orchitis,	2
Delirium Tremens,	3	Paronychia,	2
Diarrhœa,	5	Periostites Humericis,	1
Dysenteria,	3	" Crunialis,	1
Dyspepsia,	2	Pleuritis,	1
Eczema,	1	Pleurodynia,	1
Epilepsia,	1	Pleura Pneumonia,	1
Erysipelas,	2	Pneumonia,	1
Febris Com. Con.,	72	Phthisis,	3
" Intermitent,	1	Psoriasis,	1
" Typhordes,	6	Rheumatismus,	13
Fistula in Ano,	1	Rubeola,	5
" Lacymalis,	1	Scrofula,	3
" Palodo,	1	Synoritis,	2
" Perineo,	1	Syphilis,	14
Fractura,	9	Subluxatio,	1
Frambœsia,	1	Ulcus,	15
Gilatio,	3	Varix,	1

Total, 231

ALEXANDER LONG, M.D., House Surgeon.

MONTHLY RETURN OF SICK IN THE MARINE AND EMIGRANT HOSPITAL, QUEBEC, FROM THE 1st TO THE 31st OCTOBER, 1845.

J. E. D. LANDY, House Surgeon.

DISEASES AND INFIRMITIES.

Febris,	16	Stricture Urethræ,	2
Scarlatina,	1	Fractura,	11
Delirium Tremens,	2	Luxatio,	1
Catarrhus,	2	Subluxatio,	2
Asthma,	1	Contusio,	19
Diarrhœa,	3	Vulnus,	4
Rheumatismus,	7	Ulcus,	4
Icterus,	2	Abscessus,	4
Hydrops,	4	Ustio,	1
Herpes,	2	Cataract,	1
Ophthalmia,	4	Fistula in Ano,	1
Orchitis,	8	Morbus Coxarius,	1
Syphitis,	24	Morbi Alien,	6

133

NUMBER OF PATIENTS TREATED DURING THE MONTH OF OCTOBER.

Remained,	74	Discharged,	134
Since Admitted,	333	Died,	3
		Remaining,	48
Total,	207	Total,	207

* One compound of the tibia, and fibula; one of the clavicle; one compound of the humerus; one of the radius; one of the femur; one of the inferior maxilla; one of the tibia and fibula, (simplex); two of the ribs; one of the nasal bones; and one of the cranium and ribs.

OPERATIONS.

For congenital cataract fistula in ano; two cases of hydrocele; removal of index finger, with its metacarpal bone.

RETURN OF SICK IN THE MARINE AND EMIGRANT HOSPITAL, QUEBEC, FROM THE 1st TO THE 30th NOVEMBER, 1845.

J. E. D. LANDY, House Surgeon.

DISEASES AND INFIRMITIES.

Febris,	13	Phlegmon,	1
Variola,	5	Syphilis,	5
Bronchitis,	1	Tumor,	7
Catarrhus,	3	Stricture Urethræ,	1
Rheumatismus,	2	Fractura,	3
Diarrhœa,	4	Contusio,	5
Cynanche,	1	Vulnus,	2
Hysteria,	1	Abscessus,	1
Hydrops,	2	Ustio,	2
Hernia,	1	Subluxatio,	5
Aphalalgia,	1	Prolapsis Ani,	1
Pertussis,	1		
Parturitio,	1	Total,	59

NUMBER OF PATIENTS TREATED DURING THE MONTH OF NOVEMBER.

Remained,	48	Discharged,	78
Since admitted,	59	Died,	3
		Remaining,	26
Total,	107	Total,	107

* Oblique Inguinal.

† One of the humerus, one of the scapula, and one compound of the finger.

OPERATIONS.

One for the amputation of a leg; one for strangulated hernia; one for taking up the femoral artery; one for ascites; one for the removal of tumors; and several smaller operations.

BILL OF MORTALITY for the CITY of MONTREAL, for the month ending DECEMBER 31, 1845.

DISEASES	Male.	Female.	Total.	Under 1.	1 & under 3	3 — 5	5 — 10	10 — 15	15 — 25	25 — 35	35 — 45	45 — 55	55 — 75	75 upwards.
	EPIDEMIC OR INFECTIOUS.....	75	62	137	30	79	20	7		1				
Measles,.....														
Scarlatina,.....		1	1	1										
Small Pox,.....		2	2		1		1							
Hooping Cough,....	3	2	5		4	1								
Fever,.....	16	16	32	7	11	3	5		3	1	1		1	
Convulsions,.....	1	4	5	3	2									
Dentition,.....	1	4	5	3	2									
DISEASES OF BRAIN AND NERVOUS SYSTEM.....	2		2								1		1	1
Delirium Tremens,.....												1		
Paralysis,.....	3		3										1	1
Apoplexy,.....	1		1									1		
Abscess in Head,.....		1	1		1									
Hydrocephalus,.....	2	1	3	2		1								
DISEASES OF THE RESPIRATORY ORGANS.....	18	15	33	11	6			1	2	4	2	5	2	
Consumption,.....														
Croup,.....	1	3	4	1	2		1							
Pleurisy,.....	1		1											
Dropsy,.....	4		4	1		1						1	1	
DISEASES OF ABDOMINAL VISCERA.....														
Jaundice,.....		1	1											
Intern. hæmorr.....		1	1											
Age or Infirmary,.....	3	5	8										1	7
Erysipelas,.....	1		1											
White Swelling,.....		1	1											
OTHER DISEASES, AND DISEASES NOT SPECIALLY DESIGNATED.....		4	4						2	1				
Inflammation,.....						1								
Intemperance,.....	1		1							1				
Cancer,.....		1	1									1		
Still-born,.....	9	2	11											
Accidental,.....	2		2		1						1			
Total,.....	144	126	270	60	109	27	14	1	9	10	6	8	7	8

MONTHLY METEOROLOGICAL REGISTER AT MONTREAL FOR DECEMBER, 1845.

DATE.	THERMOMETER.				BAROMETER.				WINDS.			WEATHER.		
	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.	Noon.	6 P.M.	7 A.M.	3 P.M.	10 P.M.
	1,	+21	+25	+21	+23.	30.13	29.87	29.54	9.85	W.	N. E.	N. E.	Snow	Snow
2,	" 10	" 15	" 2	" 1.5	29.72	29.92	30.23	9.96	W.	W. N. W.	N. W.	Fair	Fair	Fair
3,	" 7	" 5	" 1	" 1.	30.47	30.46	30.44	30.46	W.	W.	W.	Fair	Fair	Fair
4,	+ 2	" 15	" 15	+ 2	30.23	30.07	29.72	30.01	N. W.	N. W. by N.	N. W.	Fair	Snow	Fair
5,	" 16	" 24	" 15	" 2	29.48	29.69	29.83	29.67	N. W.	W.	W. by N.	Snow	Fair	Fair
6,	" 10	" 20	" 13	" 15	30.14	30.22	30.33	30.23	N. W.	W.	W.	Fair	Fair	Fair
7,	" 4	" 21	" 21	" 12.5	30.45	30.38	30.22	30.35	W. N. W.	W.	W.	Fair	Fair	Fair
8,	" 23	" 26	" 26	" 25	30.13	30.00	29.82	29.98	W.	W. by S.	S. W.	Fair	Fair	Fair
9,	" 26	" 34	" 30	" 30.	29.72	29.59	29.50	29.60	S. W.	S. W.	S. W.	Fair	Snow	Snow
10,	" 16	" 2	" 6	" 14.	29.75	29.86	29.94	29.85	W.	N. W. by W.	N. W. by W.	Fair	Fair	Snow
11,	" 14	" 12	" 7	" 1.	30.25	30.34	30.43	30.34	N. W.	N. W.	N. W.	Fair	Fair	Fair
12,	" 13	" 6	+ 2	" 3.5	30.57	30.61	30.66	30.61	W.	W.	W.	Fair	Fair	Fair
13,	" 7	" 7	" 5	" 0.	30.65	30.56	30.40	30.54	W.	W.	W.	Fair	Fair	Fair
14,	+17	" 23	" 23	+20.	30.15	30.02	29.96	30.04	S. W.	S. W.	W. N. W.	Snow	Snow	Fair
15,	" 21	" 31	" 20	" 26.	29.90	29.87	29.83	29.87	N. W. by W.	N. W.	W.	Cloudy	Fair	Fair
16,	" 12	" 29	" 18	" 20.5	29.86	29.95	30.00	29.94	E. N. E.	E. N. E.	N. W.	Fair	Fair	Fair
17,	" 8	" 27	" 20	" 17.5	30.07	29.99	29.86	29.97	N. W. by W.	S. W. by W.	S. W.	Fair	Fair	Cloudy
18,	" 22	" 32	" 33	" 27.	29.83	29.79	29.73	29.78	W. N. W.	S. W. by W.	S. W.	Snow	Snow	Cloudy
19,	" 26	" 20	" 18	" 23.	29.72	29.78	29.90	29.80	S. S. W.	S. S. W.	W. S. W.	Snow	Fair	Fair
20,	" 18	" 22	" 14	" 20.	30.10	30.05	29.98	30.04	S. W. by S.	S. W. by S.	S. W. by S.	Fair	Fair	Fair
21,	" 9	" 15	" 6	" 12.	29.92	29.85	29.88	29.85	S. W. by S.	W. by S.	W.	Snow	Cloudy	Fair
22,	" 3	" 10	" 4	" 3.5	29.82	30.06	30.18	30.02	S. W. by S.	S. S. W.	W. by S.	Fair	Fair	Fair
23,	" 8	" 11	" 8	" 1.5	30.32	30.40	30.47	30.33	S. W. by S.	S.	S. by W.	Foggy	Fair	Foggy
24,	" 18	" 18	+ 5	" 0.	30.49	30.46	30.42	30.46	S. W. by S.	N. E.	N. E.	Fair	Fair	Fair
25,	+ 7	" 16	" 16	" 11.5	30.21	30.12	30.13	30.18	S. W. by S.	S. W.	S. W.	Snow	Snow	Snow
26,	" 14	" 20	" 7	" 17.	30.23	30.24	30.28	30.25	S. S. W.	S. S. W.	S. W. by S.	Fair	Fair	Fair
27,	" 15	" 22	" 24	" 18.5	30.19	30.06	29.84	29.82	S. W. by S.	S. W.	S. W.	Fair	Fair	Snow
28,	" 21	" 28	" 23	" 24.5	29.94	29.94	29.98	29.95	S. W. by S.	W. by S.	W.	Fair	Fair	Fair
29,	" 20	" 28	" 26	" 24.	29.84	29.78	29.70	29.77	W.	W.	W.	Fair	Rain	Fair
30,	" 24	" 25	" 16	" 24.5	29.82	29.93	30.10	29.95	W.	W.	W.	Fair	Fair	Fair
31,	" 8	" 15	" 4	" 11.5	30.30	30.36	30.44	30.37	W.	W.	W.	Fair	Fair	Fair

THERM. } Max. Temp., +34° on the 9th.
 } Min. " -18° " 24th.
 Mean of the Month, +14° 93

BAROMETER, } Maximum, 30.66 Inches on the 12th.
 } Minimum, 29.48 " " 5th.
 Mean of Month, 29.78 Inches.

MONTHLY METEOROLOGICAL REGISTER AT H. M. MAGNETICAL OBSERVATORY, TORONTO, C. W.—DECEMBER, 1845.
 Latitude 43°. 39' 4". N. Longitude 79°. 21' 5". W. Elevation above Lake Ontario, 108 Feet.

DAY.	Barometer at Temp. of 32°.			Tension of Vapour.			Temperature of the Air.			Humidity of the Air.			Wind.			Snow.	WEATHER.		
	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.				
1,	29.755	29.530	29.579	29.613	0.990	0.966	0.776	0.851	18.8	22.1	16.2	18.7	85	79	79	80	1.2	Slight snow from 3 a.m. to 4 p.m.	
2,	29.755	29.826	29.913	29.688	0.950	0.880	0.225	0.092	9.4	17.4	0.8	8.2	70	82	81	86	0.5	Cl'd am. Cl'te from 6 pm. to midn	
3,	29.962	29.868	29.743	29.811	0.481	0.503	1.110	0.951	10.2	19.1	23.4	20.3	64	75	85	78	0.2	Cl'te am. Slight sn. 9 am. to 3 pm.	
4,	29.536	29.421	29.326	29.383	1.291	1.148	1.130	1.332	26.9	29.2	25.2	26.1	87	92	93	92	0.5	Slight sn. till noon. Rem't cl'nded.	
5,	29.366	29.731	29.609	29.609	0.885	0.922	1.104	1.021	21.4	24.8	21.1	22.8	71	67	89	89	0.1	Part. cl'nd. Part. of sn. occasionally	
6,	29.915	29.945	30.085	29.932	0.924	1.108	0.993	1.07	21.7	26.2	20.0	23.6	78	74	82	82	0.1	Partially cl'nded.	
7,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Partially cl'nded.
8,	29.669	29.481	29.402	29.475	1.232	1.168	1.144	1.149	24.6	32.0	29.6	29.0	92	84	89	83	0.2	Cl'nd. all day. Slight sn. 6 to 10 am.	
9,	29.317	29.234	29.272	29.310	1.444	1.533	1.140	1.189	30.3	32.6	29.6	28.6	84	83	85	87	0.75	Cl'nded. Slight sn. occas'ly.	
10,	29.573	29.581	29.661	29.647	0.776	0.685	0.071	0.065	15.0	17.9	15.1	14.1	83	66	78	73	0.75	Mostly clear. Spt sn. occasionally.	
11,	29.904	30.012	30.088	30.040	0.932	0.952	0.938	0.934	3.6	9.0	6.4	5.9	57	74	61	55	—	Generally clear. Spt sn. occasionally.	
12,	30.188	30.181	30.152	30.168	0.19	0.925	0.883	0.723	1.6	19.8	19.1	15.0	42	85	78	74	—	Generally clear.	
13,	30.041	29.880	29.720	29.800	0.69	1.155	1.149	1.142	13.2	20.3	32.3	29.3	82	91	81	85	—	Generally clear.	
14,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Am. clear. P.m. mostly cl'nded.
15,	29.518	29.458	29.577	29.537	1.70	1.136	1.118	1.140	31.1	31.4	27.2	29.1	98	77	79	87	—	Cl'nded, slight rain noon to 1 p.m.	
16,	29.668	29.672	29.708	29.666	1.03	1.156	1.140	1.134	21.9	34.4	28.1	28.2	85	78	90	85	—	Genly cl'nded am. Cl'te from 6 pm.	
17,	29.599	29.403	29.350	29.431	1.48	1.168	1.183	1.167	29.8	37.0	36.0	34.6	79	77	87	84	—	Clear am. Light clouds p.m.	
18,	29.374	29.313	29.217	29.236	1.35	1.41	1.62	1.158	32.8	34.6	31.3	28.2	82	70	93	70	—	Genly cl'nded. Slight rain 5 pm.	
19,	29.385	29.435	29.583	29.500	0.41	0.685	0.047	0.048	7.1	12.0	10.3	10.0	62	72	63	63	—	Genly cl'nded. Spt sn. 10, 11 pm.	
20,	29.694	29.667	29.651	29.657	0.45	0.661	0.040	0.057	8.6	15.3	10.0	11.7	65	65	53	53	—	Genly cl'nd. Spt sn. 7, 8 am. & 11, 12 pm.	
21,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Overcast. Haze. Spt sn. 4 pm. to midn
22,	29.606	29.653	29.780	29.710	0.65	0.688	0.064	0.069	10.6	30.2	12.8	14.2	74	78	76	78	—	Generally overcast.	
23,	29.856	29.890	29.955	29.853	0.67	1.113	1.103	0.995	15.8	24.4	20.2	20.6	72	84	91	82	—	Partially clear am. Cl'nded p.m.	
24,	29.947	29.912	29.864	29.912	0.84	1.122	1.114	1.021	18.7	27.6	25.1	21.6	80	80	82	83	—	Density cl'nded all day.	
25,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Density cl'nded all day.
26,	29.974	30.003	29.988	29.985	0.70	0.922	0.069	0.069	15.3	21.6	14.4	14.9	77	77	79	75	—	Snowing am. Cl'nded p.m.	
27,	29.856	29.578	29.566	29.598	0.77	1.112	1.119	1.124	15.9	28.6	28.2	26.7	81	71	76	82	—	Mostly clear all day.	
28,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear am. Genly cl'nded, p.m.
29,	29.426	29.388	29.486	29.487	1.83	1.185	1.166	1.161	32.8	35.6	32.9	33.4	98	89	89	86	—	Cl'nded all day.	
30,	29.571	29.680	29.823	29.743	1.26	1.135	0.099	1.05	27.6	27.0	22.7	23.1	82	90	79	81	—	Densely overcast all day.	
31,	29.988	29.968	29.857	29.912	—	—	—	—	9.8	23.7	25.8	21.7	—	—	—	—	—	—	Overcast. Spt particles of snow.
Mean	29.709	29.673	29.694	29.680	0.990	1.115	1.103	1.102	18.1	25.1	21.6	21.5	77	79	80	80	—	—	Cl'te till 8 a.m., rem't mostly cl'd.

Highest Barometer, 30.215 at 10 a.m. of 12th.
 Lowest do. 29.217 at 10 p.m. of 18th.
 Highest Temperature, 39° 7 on 14th, p.m.
 Lowest do. 2° 4 on 12th, a.m.
 Mean Daily Range, 13° 8
 Extreme Daily Range, 28° 7 on 18th, p.m.—19th, a.m.

Under the head of Tension of Vapour, is given the elastic force of the Aqueous Vapour in the atmosphere at each Observation, in decimals of an inch of Mercury, or the proportion of the Barometric pressure due to its presence.
 Under the head of Humidity of the Air, is given the proportion the Aqueous Vapour bears to the quantity the air is capable of sustaining at the existing temperature, saturation being represented by 100.
 The Instruments are Standard Instruments. The Rain Gauge 27 cts above the soil.
 The Means entered are the Means by 24 hourly Observations, from 6, a.m., to 6, a.m.
 The quantity of Rain received each 24 hours, is noted at 9, a.m., and is marked in inches.

* Melted Snow received in Rain Gauge.
 Proportion of Wind from each Quarter—
 N.W. 173
 N.W. 152
 S.W. 65
 E.E. 61
 N.E. 183

Proportion of Calm, 183