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ORIGINAL COMMUNICATIONS.

ART. XXIX.—*On some points in connection with Sanitary Science.* By DAVID WOODS, M. D., L.R.C.S.I., Asst. Surgeon to the Forces.

(Conclusion.)

We have already had occasion to remark that, at the present time, England as a nation, presents us with a lower death rate in proportion to population, than any other country with whose statistics we are acquainted, and we also remarked that such a happy result has only obtained within a brief period. Previous to the great fire in the reign of Charles II. London was noted for the severity of the pestilences by which its people were attacked; indeed, up to the close of the 17th century, the history of London furnishes us with a series of epidemic pestilences, so fatal in their nature that, had not the city been constantly recruited from the country, the entire population must soon have disappeared. Let us review this subject briefly, in order to show how vastly improved is the public health in the 19th century, relatively to any previous period, and this, notwithstanding the fact that a total immunity from pestilence was experienced by London during the whole of the 18th century. In this last mentioned period the deaths from fever amounted to 54 in each 10,000 persons, whilst in the middle of the present century the proportion is only 35, and the general death rate which then exceeded 35 per 1000 of the population, now equals but 25.

Again, the births in London during the 18th century were exceeded by the deaths. But it is only by a reference to the statistics of plague in the year 1625 and 1636 (two of the best authenticated) that we can form any idea of the mortality prevailing in England in former times. Dr. Greenhow, in his paper illustrative of the pestilences of London, thus writes of this period, and compares it with the cholera period of the present century. The average annual number of deaths returned in the bills of mortality for each of the six healthy years, 1631–1635, inclusive, was 9704. The total mortality returns for the years 1625 and 1636, when the plague prevailed, was 54,625 for the former, and 23,359 for the latter year.

The plague visitation of the first of these years, therefore, raised the mortality for that year to more than five times the annual death loss. The visitation of 1636 was much less severe. Fully to realise these facts, conceive the mortality of the cholera visitations of 1849 and 1854, raising the deaths in London from 68,755, the actual number in 1849, and 73,607, the actual number in 1854, to 266,885 for the earlier, and 132,442 for the latter outbreak. In 1625 no fewer than 35,417 fell victims to the pestilence. In 1636, 10,400 deaths were caused by the plague. It is rather a curious circumstance, also mentioned by Dr. Greenhow in his paper, that the so-called alvineflux which prevailed in London during the latter half of the 17th century, and after a brief period disappeared, should again, after the lapse of upwards of 100 years re-visit our shores under the name of cholera, and in the 19th century seek out its victims. Few, however, they have been, compared with the number which succumbed to its influence in earlier times, but the mortality from this cause was then disregarded, in consequence of the more dreaded pestilences, epidemic, or we might almost say, endemic, to the time. If we compare the ten years, 1681–1690, when the disease was declining, with the period from 1846 to 1855, comprising within its period the years of the two last visitations of cholera, we find the mortality in cycle, the former to have averaged 477 in the 10,000 persons, whilst in the latter it has only been 257. It is unnecessary to follow the subject further. Enough has been put forward to show how fatal were the pestilential visitations of those mes, and with such an enormous death we can form a conception as to how lowly the population increased. In fact, if the returns of the period are correct, the population of London only increased 40 per cent. during the 116 years intervening between the reigns of Charles II. and George III. Let us now take a glance at the present sanitary condition of England, and contrast it with the period to which we have alluded; we shall find that, notwithstanding the vastly improved condition which obtains, much still remains to be accomplished. If we regard the population of England and Wales in 1856 as amounting to 19,000,000, we find from the returns furnished by the Registrar General for that year, that the total mortality was a little over 20 in each one thousand of the population; the average for the nineteen preceding years having been 22 in the 1000. In some parts of the country the death rate was so low as 15, whilst in other parts, as the County of Durham, it rose to 25 in the 1000; due, as remarked in the report, to the deplorable condition as regards sanitary measures in which the towns have been left by the municipal governing bodies. Taking the total average mortality, it is found that 25 in the 1000 die in towns, whilst only 19 in the 1000 die in the country, and nearly half the population is concentrated in the cities and towns of the kingdom. We thus find that the mortality resulting in towns is in excess of that in the country by six in every thousand of the population; and when we reflect that much in the way of sanitary improvement yet remains to be effected among the agricultural population, we place the excessive mortality in towns in a strong light. Of the deaths during the year under consideration, the returns show that 78,048 occurred from Zymotic diseases, and 48,950 from phthisis. Of the 78,048 deaths it has been

calculated that 67,000 at least took place from causes capable of prevention or amelioration, and if to this we add 33,000 of the deaths from phthisis, we have a total of 100,000 lives sacrificed at the shrine of ignorance and neglect of the ordinary precautions necessary to our well-being. It may be assumed as a low average that, taking the total of the deaths in England, including those from infancy, there annually occur 100,000 fatal cases over and above those necessarily resulting from the ills humanity is heir to; yet, notwithstanding this waste of human life, it has been proved by the return of 1856, that 46,000 persons were then living who would have been dead had the same death rate prevailed as that of the ten preceding years; and, moreover, that the loss of life in 1856 from the same causes was 35,197 less than in the preceding year. Many, if not all of these lives were saved by the fruits of sanitary science in the drainage and ventilation of the large cities and towns. We have stated that in some counties the mortality was only 15 in each thousand of the population; it would, perhaps, be calculating from wrong data to assume this as the rate at which the mortality proper and necessarily incident to a country should be put down, and yet here even death must have happened from causes under control. It has, I believe, been assumed that 17 in 1000 is in the present condition of English society, a fair average at which to put down the necessary mortality, and that all deaths over and above this proportion are unnatural and capable of prevention. But much as we learn from the foregoing record, the lesson sinks into insignificance when compared with that taught us by the statistics relating to the awful waste of human life during the Crimean campaign, and the truly wonderful results following the application of measures having for their object the prevention of Zymotic disease. I shall here advance facts relating as well to the French as to the English army. The returns for the English army have been calculated from the period of leaving England in the month of April, 1854, up to the month of March, 1856, and the return of deaths for the sake of perspicuity is shown under the heads of Zymotic diseases, wounds and injuries, and from all other causes; we find then that during the month of April, 1854, when the strength of the army was 8,571, that the deaths include one from Zymotic disease, and five from all other causes. In July of the same year and the first month of the cholera pestilence, with a strength of 28,722, the deaths from Zymotic disease rose to 359, giving an annual rate of mortality per 1000 equal to 150. From this period until the month of January, 1855, when our sufferings and misfortunes reached their climax, the death rate had gone on increasing, and in the last named month stood as follows:—Strength, 32,393; deaths from Zymotic diseases, 2,761; from wounds, 83; from all other causes, 231, and presenting us with an annual mortality per 1000 in the proportions 1022.8 for Zymotic diseases, 30.7 for wounds, and 120 for other causes. From this period improvement, slow at first, gradually quickened its pace, its extent in a brief period will be better understood and appreciated by putting the returns for several of the months in a tabular form.

MONTHS.	Estimated Average Monthly Strength.	DEATHS.			ANNUAL RATE OF MORTALITY PER 1000.		
		Zymotic Disease.	Wounds and Injuries.	Other Causes.	Zymotic Disease.	Wounds and Injuries.	Other Causes.
1855, January	32,393	2761	83	324	1022.8	30.7	120.
" February	30,919	2120	42	361	822.8	16.3	140.1
" March	30,107	1205	32	172	480.3	12.8	68.6
" April	32,252	477	48	57	177.5	17.9	21.2
" June	38,863	802	209	31	247.6	64.5	9.6
1856, February	43,485	24	"	19	6.6	"	5.2
" March	46,140	15	"	35	3.9	"	9.1

To enhance the value of the returns for the month of April, 1855, it must be remembered that the siege which with us had slumbered throughout the winter from the paucity of healthy men, and the impossibility of getting guns and ammunition to the front, was at this period carried on with full vigour. In June, owing to the fresh arrival of unacclimatized troops, the mortality rose higher than the previous month, but with this exception, and that of August and December, it ever after gradually decreased, until, finally, in the month of March, 1856, the total deaths from zymotic disease numbered but 15 victims in an army of 46,140 men, presenting us with the wonderful fact of an annual mortality of 3.9 per 1000 men, or a proportion six times less than the proportional death rate for London, and four times less than that of the healthiest county in the healthiest country in the world. Let us by means of a proportion calculate what the death rate would have been with the strength in March, 1856, had the same conditions and mortality obtained as in January, 1855, and place the numbers side by side:

Deaths in March, 1856, with January, 1855, death rate 1455.7
Actual mortality in March..... 3.9

And now the question may be asked, was all this saving of human life due to the enforcement of sanitary laws? It was not, but much, very much was due to the teaching and practice of sanitary science. The enforcement of Hygienic laws would have availed but little in the months of January and February. An extent of trenches had to be guarded quite out of proportion to the number of men fit for duty, and present in the field; these men were often on duty for two days consecutively, including night work, to have slept would have been to get frozen, their clothes were in rags, boots most had but in name. No fuel, could be had other than the roots of bushes dug for at chance from the ground, damp and difficult of ignition. Tired and worn out many cared not to cook their provisions, some ate their pork raw, others went without, and lived on the hard dry biscuit, the dead and living lay in their tents together, hospitals and medicines there were none, our strength may be represented by a mass of figures, but of real strength we had little. Such is a brief picture of what our condition then

was in the field, and had that army been composed of other than Englishmen, no remnant would have been left; but the nation rose up like one individual, and putting forth those immense capabilities, never, even in times long passed away, found wanting, stretched forth her arms to save. In six short weeks the scene was changed; the torn and shattered tent beneath whose thin covering the winter had been braved, gave way to the comfortable and well ventilated hut, means for disinfecting the foul places of the camp which had grown up as a necessity around were furnished, comfortable and commodious means of cooking were erected, and finally the hospital huts presented such a picture of cleanliness, neatness, and comfort as I have never seen rivalled, each hut was detached well ventilated and thoroughly lighted on two sides. Yet is the lesson none the less instructive. The troops still occupied the old ground; surrounding the camp were latrines, the production of 17 months; in the ravine below lay the bodies of thousands of both armies who had fallen during the siege,or died from disease,and from whose remains at one period an intolerable odour was given off: all these and much more had to be provided against. How much was done and with what effect is best shown by the figures 3·8.

England never had an army in such a sanitary condition as was this at the close of the war, and history affords no correlative; but from the moment that camp was broken up and the return from what may be called a Nomadic to civilized life commenced, so did a high sanitary condition cease to prevail. Leaving out of consideration for the present that portion of the army, most of whose service is passed in climates inimical to European life, and taking only the household troops and dragoons who spend most of their time at home, and comparing these latter with the civil male population of England and Wales at army ages, viz, 17–45, we find that in the household cavalry, the mortality averages 11.0 per thousand: in the Dragoons, 13.3, and in the Foot Guards 20.4, whilst the total mortality of the town and country together, *between the same ages*, only equals 9.2, and that of the country *per se* 7.7, that is to say, that the Foot Guards of England, the finest looking men in the world, selected from the choicest of the agricultural and most healthy portion of the population, and tested by medical officers before admission as to soundness and physique, die nearly in the proportion of 3 to 1, as compared with that portion of the population from whom they are in great part selected. With regard to the whole army, it may be briefly stated, that if soldiers at home only died in the same proportion as the people from whom they are drawn, the mortality would only amount to one half what it is at present. The cause of such excessive mortality has been proved to a demonstration to depend on the neglect of sanitary measures, now happily being taken account of, and when the statistics of our army serving in England can show a less death rate than the town population of England and Wales, a desideratum considering the care bestowed on the selection of the soldier, and on his ultimate well being surely to be arrived at, the nation may turn with thankfulness to those men, who wise in their generation, have brought out and carried into effect the natural precautions necessary, in the conditions of our existence, to the preserving of health and saving of life.

Neither our time nor space will permit us to devote the same amount of

attention to the Statistics of the French Army during the war, as that which we gave to our own forces, a comparison however will be useful, and we may therefore briefly glance at the subject. As to strength, it will be sufficient to state, that the total number of French troops in the Crimea from the commencement to the termination of the war amounted to 309,268. During the winter of 1854 and 1855 so calamitous to the British forces, neither did the French escape unscathed. The month of January (our worst period) sent to the hospital 15,000 sick out of a strength of 78,000, and whilst as regards the British, January proved the most disastrous month with the French, February was even worse, no less than three thousands cases of scurvy (a proof of how deteriorated was their physique) having been admitted to hospital. As to provisions they were even worse off than we were, but they had nearly double the number of men to do the same amount of work, and therefore had time to cook their provisions and attend to their physical well-being. Leaving however this period let us turn to that of the following winter, when the sanitary condition of the English Army presented such a brilliant picture. The beginning of the year 1856, and the close of that of 1855, unfortunately found the French forces, in almost as bad a condition, as regarded food, clothing, hospital accommodation, &c., as had the previous winter in our own army, they were scattered over a large area, which should have been on the whole advantageous, but this ground was throughout a large part damp and marshy. I shall never forget the pale wan looking faces, more especially of the young soldiers we used to meet everywhere throughout the camps, whilst the old soldiers to use the words of Mr. Baudens were quite used up. Typhus, Scurvy and Dysentery began to do their work, but particularly the first, which as time went on increased in intensity and frequency, until the mortality at length became something frightful. In January and February upwards of twenty seven thousand fresh cases of zymotic diseases were received in the hospital. To sum up the description of the disaster it may be stated, that from December 1855 to March 1856, twenty thousand cases of typhus fever were received into hospital, nearly one half of whom died on the ground. During the same period upwards of 28,000 sick from other causes came under treatment, of whom a fourth part perished, and 28000 were sent for further treatment to Constantinople many thousands of whom died on the passage or afterwards in the general hospital, which were in quite as bad a condition as had been ours the previous year. Such is the sad history of this period and such to use the words of Dr. Milroy (from whose paper most of these facts have been collected) are some of the fruits of war even to a victorious army in the latter half of the nineteenth century.

We have now reviewed sanitary science in its moral and medical aspect, let us finally and very briefly look at what it may do for us in an economic point of view. From the period of birth up to the age of puberty, the power of resisting disease gradually increases, but now this power slowly begins to decline, and after the age of 45 declines rapidly. Statistics again have proved to us, that men belonging to the labouring, population are more frequently attacked by fever, during the period intervening between the ages of 20 and 30, than during any other term of life;

in fact that the numbers then attacked equal or nearly so that of all the other periods put together. Dr. Southwood Smith thus sums up his analysis of this question. Taking the four years 1825 to 1828, he found that the total number attacked amounted 2537; of this number 459 occurred under 20 years of age, 1168 between 20 and 30, 531 between 30 and 40, and 389 between 40 and 80, thus confirming the circumstance, that the numbers attacked between 20 and 30 nearly equal those of all the other periods added together, and that the period during which fever is so prevalent, among the working classes, as to deserve particular attention, is the term of life intervening between 20 and 40. Now we also know from statistics that the labouring population marry much earlier and more improvidently than do the higher classes; for them the idea, of artificial wants limiting and controlling the productive powers of the species, has no existence; he who lives from hand to mouth has little hold on the future and never looks into the future; they marry early and have young families, just at the specific period when a particular aptitude exists in their systems for febrile disease. As a result of this a very large number of widows and orphans are thrown on the poor law or other charitable institutions of the land, and once habituated to relief of this kind and the idleness naturally superinduced thereby, they lose those feelings of self reliance and self respect, so necessary to useful members of society. The seed thus early planted bears its fruit throughout future generations, and so great is the evil that many able political economists and philanthrophists have doubted the efficiency of charitable institutions. I could go on to show the loss in value accruing to a nation from sickness, as well as death, but by so doing I should be trespassing on my limits. I have said enough to show how intimately related is sanitary science to our well-being, from whatever point of view we may regard it. It is not alone the child, it is the very essence, of civilisation. In conjunction with a nation's increase in wealth and the means by which it is attained, rise up, as necessary consequences, evils, which without the protecting care of hygienic rules, would rather tend to render the acquired wealth a curse than a blessing. The attainment of riches naturally draws together into large communities an immense proportion of the human family. The masses are brought into close contact, not alone in towns but also in buildings, and when in these places the requirements of ordinary sanitary rules are neglected, the results are most fatal. Death is not alone the destroyer. From such aggregations, breathing organic impurities, the ejecta of the the undrained site, the crowded and unventilated room, the hard wrought artizan goes forth poisoned in his vitals; he procreates a progeny with the seeds of an early mortality engrafted in their systems; these again, ill nourished and living in most cases in squalid misery, are placed ere the germs of strength have had time to develop, in the crowded factory or teeming workshop, and the evil half begun is too soon finished by an early death. The artizans of France extend not beyond the fourth generation. Happily these things are being looked into and ameliorated, but in a country like England, and the colony in which we write, where the blessings of a free constitution prevail, every man's house is his castle, and who shall dare to interfere. Sanitary legislation has therefore a limit as regards private individuals, but when large masses of the community are

interested as regards not alone their own health and happiness, but that also of generations posterior to the present, it behoves the legislative body to step forward and interfere, that thousands may not suffer to gratify the cupidity of single individuals. All powerful also to do good and bring forth a rich harvest is early education respecting these matters. Let the science be taught in every school; let the evils arising from its neglect be shown to the young and rising generation; let those habits of cleanliness of person and household so necessary to health be made manifest; and finally let the children of the more responsible classes, upon whom may devolve the duty of landlord, or employer or both, learn that when manhood arrives and they become members of a wide spread community, bearing upon their shoulders the burthens of taxation, that for every widow and orphan by whom they are surrounded, an increased expenditure is necessary, and that the institution of sanitary measures in a country is a direct means not only to prolong their own lives, but that also of the humbler classes who look up to them for the means of support.

Montreal, March 1st, 1860.

ART. XXXII.—*Cases in Surgery.* By HORACE NELSON, M. D., late Editor of "Nelson's American Lancet"; Former Professor of Surgery in the University of Vermont, &c., &c.

No. 4. Impromptu Tracheotomy; a thumb-lancet, pocket-knife, and clay pipe the instruments. Recovery.

"How many persons have perished, perhaps in an instant, and in the midst of a hearty laugh, the recital of an amusing anecdote, or the utterance of a funny joke, from the interception at the glottis of a piece of meat, a crumb of bread, a morsel of cheese, or a bit of potato, without a suspicion, on the part of those around, of the real nature of the case." *Foreign Bodies in the Air-Passages*, p. 43.

In exemplification of the above remarks of Prof. GROSS, the recital of the following case may not prove uninteresting to the Readers of the *British American Journal*, at the same time that it shows what should or could be done in cases of great emergencies. On the 19th January, 1857, while coming from the Post Office, in Plattsburgh, I was stopped at the door of a grocery-tavern, and called in to meet Dr. Hall to see a man supposed to be dying. Stepping in, I found an old soldier, of the Peninsular War, named Davis, and for many years an inmate of the County Poor House, evidently expiring—his face was blue, suffused and bedewed with cold sweat; the eyes staring wide, fixed and glassy; the mouth opened; pulse just flickering at the wrist, in one word the cold hand of death was pressing upon him with fearful rapidity and certainty. In a few seconds I ascertained the following particulars:—that morning he had deserted —as was his wont frequently to do—from the Poor House, and came to the Village for a glass of grog, obtained upon the proceeds of begging from a few who pitied the lone and decrepid soldier; and on this occasion having been more than usually fortunate in his foraging expedition, he resolved to indulge in some-

thing of a dinner; after taking a "hasty plate of soup," he went to work in demolishing a piece of shank beef, and with hunger and the loss of his teeth he was disposed to do justice to his coarse food when, after taking the first mouthful—and not a small one at that—he was noticed by the landlady to gasp, turn blue in the face, and drop from the chair upon the floor. Dr. Hall was immediately sent for, when, seeing the danger and urgency of the case, he requested my assistance. Presuming that the suffocation resulted from the impaction of a piece of bread or meat in some portion of the larynx or trachea, I opened the man's mouth as wide as possible, but neither with the eye nor finger could I detect anything; the all certain and prompt death of the poor fellow staring me in the face, left me no time to speculate upon the course of treatment to be adopted, and still less to run to my surgery a few squares off, to procure the necessary instruments; therefore, I at once proposed to the Doctor, in which he readily acquiesced, that desperate as the case was, there remained but one chance and that was to make an opening in the trachea. Seating the man on a chair near the window, the head being thrown back as far as possible, with a thumb-lancet I cut through the integuments, cellular tissue and fascia, from opposite the cricothyroid space, in the median line, over the cricoid cartilage down to the two upper rings of the trachea; separating, by scratching with the finger nail and handle of the lancet, the sterno-thyroid and hyoid muscles from their congeners, the cricoid cartilage and rings of the trachea were exposed to view, to divide which with my lancet was quite out of the question, they were so old and ossified, that I had to resort to a good sharp penknife; steadying the larynx and trachea with the thumb and first finger of the left hand, I cut, not without much difficulty, through the cartilage and rings, when at once froth and mucus issued from the wound, and the sucking in of air told me that the obstruction, whatever it might be, could not altogether be below the opening. The immediate danger being in some respects now passed, I took time to look around, if not to breathe, for the operation had been performed before I had scarcely any idea that it had been begun; there being nothing in the shape of spoons, except big pewter ones one of which of itself would have completely filled the wound, to keep the lips of the opening apart, I called for a smoking pipe, and breaking the stem three quarters of an inch from the bowl, passed it into the trachea and although the opening was certainly very small, there was still a sufficiency of air introduced to carry on the respiratory process; the suffusion of the face began to decrease, the colour returned to the lips, and the cold and glassy appearance of the eyes gradually and slowly gave way to a more natural and less dreadful expression.

Looking about me for something to act as a probang to explore the trachea, I seized upon a whale-bone rib of an umbrella and rounding off the end, passed it downwards to the bifurcation of the trachea, when finding every thing clear in that direction, I next turned it upwards when its progress was soon stopped by something which, for a moment, effectually prevented the further advance of the whale-bone; but I was determined that an opening should be made there and that something ought to be removed; opening the old man's mouth, and pushing with considerable force from downwards, I fancied that glottis, epiglottis and the components of the regional anatomy of the posterior fauces were being pushed

up into the mouth, I now thrust in two fingers, seized hold of some substance, and with a good pull drew away a large piece of beef that had become firmly impacted in the rima glottidis. At once the trouble was at an end, the old fellow looked rather surprised, if not foolish, at the figure he was cutting, and staring at the laughing crowd wondered what the trouble was, and why he was not eating his dinner; the edges of the divided integuments were brought together by two sutures carried through a large cambric needle, and a compress and bandage completed the dressing.

The next morning Davis returned to his quarters, and was quite well in a few days. When my bill was presented to the County Poor Authorities, I was allowed five dollars (because I had not been employed by them) for saving the poor creature's life, with the gentle hint that had I allowed him to die, they might have had no objection in paying the whole amount charged—fifty dollars —as I would have done myself and my "fellow citizens" a service, as tax-payers in ridding the County of a man who had been a burden upon it for over thirty years! The poor old fellow had seen hard service in Spain; was wounded three times at the battle of Albuera, a ball passed through the shoulder producing partial paralysis of the right upper extremity, and during the same action he lost the sight of one eye: a few years after he became deaf, and to finish the chapter of his infirmities, in 1854 I removed one of his testicles for cancerous tubercle, and in 1857 a piece of tough beef came near putting an end to his precarious existence.

The novelty of the accident, the promptitude of the operation and its unexpected success, together with the well-known name, if not history, of the old "Britisher," invested the case with more than usual interest, and the Editors of the three Plattsburgh papers called upon me for a few notes, which were published under the head of "local items." A couple of weeks after a copy of the *Albany Argus* was placed in my hands, with the notice that a gentleman dining at the Stanwix Hall in that city fell back in his chair, to all appearance dead; the medical man of the house was immediately summoned; he came, examined the case, diagnosed that something had lodged in the windpipe, and that he should have to go to his surgery for the necessary instruments. This he did, and returned with his armamentarium in about twenty minutes, when he found the man stone dead, and stretched out upon a table in a private room. An examination showed that a piece of beef had become impacted in the glottis, closing it and inducing almost, if not truly, instantaneous death.

Another case in illustration of the criminality in not being prepared to meet emergencies. Dr. Allen of Rockville, Indiana, was sent for to go a distance of four miles in the country to see a young child, without being apprized of the nature of the ailment; on his arrival he found out that tracheotomy was required, he rode back home for his instruments, and before his return, the child had expired!—(Gross, *Foreign Bodies*, &c., p. 208.)

When the danger in any case is so great and impending, it is not only folly, but culpable negligence on the part of the medical man to wait till he has procured all his instruments, and perchance, consulted some book to renew his acquaintance with anatomical facts and boundaries long since studied, and as long

since forgotten; the patient dies, and although from the nature of the accident, non-professional persons may not directly attach any blame to the physician, still the latter cannot entirely divest himself of the idea that he should have attempted the operation let the result be what it may.

Another cause of postponement on the part of the junior practitioner is the fear of performing this, as well as many other operations; and this, to a certain extent, is principally attributable to the course adopted by some teachers of surgery and anatomy, who clothe their descriptions of the various surgical regions, and the operations occasionally necessitated therein, with such anatomical niceness and minuteness, the innumerable difficulties to be encountered, the vast dangers to guard against, the whole shrouded in such a cloak of apparent forebodings, accompanied with *such* shrugs of the shoulders and knowing turn of the eye, as much as to say—though they truly mean it—"Boy's don't touch them; send them here, we are the men to do these things!" Many young men are literally *scared* out of performing the most trivial operations, by the recollection of what they have heard and seen in the lecture room. Well do I remember listening to the teachings of some most distinguished surgeons and anatomists, and with all eyes and ears, I was amazed at their erudition, astounded at their boldness, if not recklessness in undertaking some of those grand operations—which have shed such a bright lustre on their names, and made them the Napoleons of the Surgical World—the various steps of which they detailed with such *gusto*, led me almost to think that there were but few, if indeed any, who could, or had a right to perform such operations except themselves; and it is more particularly for this reason, that some of the surgeons of all large cities enjoy such a large country consultation and practice, as the young physician either unwilling or unable to perform any operation, sends the subjects to the city, where they are always well received, and, in some instances their expenses are not only paid, but a bonus is thrown in to secure the case.

On another occasion I will make a few practical remarks upon the operation of Tracheotomy, and show that it is easily performed, far from dangerous, and, in the great majority of cases, followed with successful results.

Montreal, 27½ Little St. James Street,
21st May, 1860.

ART. XXXIII.—*Mechanical Obstruction of the Intestines, Volvulus of the flexure of the Colon, gastrotomy, death.* By P. O. Tessier, M.D.

Mrs. C. G. a young woman of good constitution, took sick on the 8th of last month. I was sent for in the afternoon, and I found her with a slight fever, a hot but not very dry skin, a quick pulse, headache, a glossy and slightly furred tongue, with an irritable stomach, and colicky pains around the navel; her bowels had been moved the previous evening. She blamed getting her feet wet for all this difficulty. I prescribed chloride of mercury and compound ipecacuanha powder for the evening, to be followed by some evacuant medicine in the morning.

On the 9th, she was a great deal worse, her stomach more irritable had rejected the medicine, and her bowels had not been moved. Sixteen ounces of blood were abstracted from the arm, a prescription of chloride of mercury and opium was ordered, and low diet enjoined.

On the 10th and the 11th, the patient was a good deal better, but her bowels had not been moved. I ordered castor oil which the stomach rejected.

On the 12th, purgative doses of chloride of mercury were administered with olive oil enemata, but all to no purpose; she threw up the contents of the stomach and had no passage through her bowels, though her urine was free all the time. The train of symptoms observed at the onset of the malady returned with increased violence. After having ascertained that the abdominal and pelvic apertures were all right, and having made a close examination of the rectum and vagina, I began to suspect the presence of an internal mechanical obstruction, although the symptoms were not well defined. I was advised to try frequent fractional doses of sulphate of magnesia, with turpentine clysters, fomentations over the abdomen, and general hot baths, all which was strictly carried out.

On the 13th, she threw up some stercoraceous matter and pre-sented an aggravation of all the symptoms previously noticed, but as yet there was no evidence of the precise locality of the internal mischief. Dr. Lemieux had been called in by the family, and I suggested the names of Drs. Blanchet and Bardy, Jr., who were immediately sent for. We agreed to resume the purgative doses of chloride of mercury, the enemata, and the baths.

On the 14th, the distress of the patient was greater; and as I felt something like a tumour on the left side of, and a little below the navel, I came to the conclusion that I had to deal with a volvulus of the flexure of the colon, causing a mechanical obstruction irremoveable by any but operative interference. My professional brethren confirmed my judgment, and I and they apprized the patient and her friends of the precarious state she was in, and told her what a small chance of life an operation would leave her. She wasted six valuable hours in deciding upon submitting to the operation. At first her vital depression was not very great.

When her mind was made up, she was placed on a table, in a good position, and in a room properly heated. As soon as she was fully under the influence of chloroform, I placed myself between her knees and made an incision in the mesial line, from the umbilicus to about an inch of the pubis, through the cellular tissue, the sheet of the left rectus,—the relation of parts having been deranged by the intumescence,—and then through the aponeurosis of the oblique muscles, when I reached the peritoneum which I divided on a director with a probe pointed bistoury; a gush of serum ensued followed by coils of thickened, distended, and discolored intestine, curling over the wound, so much so as seriously to interfere with a proper examination. I then extended my incision to about two inches and a half above the umbilicus, whilst the intestines were supported by my assistants.

I immediately searched for the flexure of the colon which I found readily, but so convoluted that I could hardly recognise the direction of the twist. Whilst examining it a softened patch above the constriction gave way, which allowed

the contents of the intestines to flow out, but a ligature was immediately placed on the aperture which was about a quarter of an inch large. I then divided an adventitious band crossing the convolution, and the obstruction was at once relieved when another patch gave way at the twist, which allowed the contents of the intestines to flow out, a small quantity of which fell into the abdominal cavity. This was sponged out as carefully as possible, a ligature was applied to the rupture, and the intestines were replaced. The wound was closed and dressed with twisted sutures and long strips of plaster across the abdomen, the whole supported by a broad bandage round the body. After the operation was over, the patient was put to bed, quite exhausted. She was given stimulants which rallied her for a while, but she sank again and died about two hours after the operation.

The case was not very satisfactory in its results, but I had a duty to perform, and the moment I could satisfy myself as to the nature and the seat of the obstruction I operated, and I do not regret having done so. Under similar circumstances I have no hesitation in saying I would act in the same manner.

The only thing I regret is the length of time the patient took to decide on submitting to the operation.

QUEBEC, May 10, 1860.

REVIEWS, &c.

ART. XXXIV.—*Lectures on the Diseases of Infancy and Childhood.* By CHARLES WEST, M. D. Third American from the fourth revised and enlarged English edition. 8 vo. pp. 629. Philadelphia. Blanchard & Lea. 1860.

The publishers of the present edition of West's valuable "Lectures on the diseases of Infancy and Childhood," have done the profession on this continent a signal service by placing this volume before it, and in further enriching it by two additional lectures by the same author, the first on "sudden death in infancy and childhood," and the second, "on cerebral symptoms independent of cerebral disease."

A work which has passed through four editions in the course of twelve years, the volume before us being the fourth, requires no proof of its value beyond that fact, and nothing can more convincingly show the strong hold which it has taken on the mind of the Profession. Such a fact disarms criticism, whether in regard to its merits or its demerits. Such a work is precluded from the treatment which is extended by a reviewer to any new aspirant to professional confidence. We have taken up Dr. West's book, and have welcomed it, as an old friend under a new dress, considerably enlarged and materially improved, and that enlargement, not made for the mere purpose of amplifying the volume, but existing in the improvements, which consist in the correction of errors which will, however unintentionally, creep into the most carefully prepared work, and

in additional information on many most important points. Dr. West's field for observation has been a most extensive one as "physician to the Hospital for sick children" in London; and that his opinions are deserving of great weight may be assumed from the fact, that these lectures "embody the results of 900 "observations, and 288 post mortem examinations made among nearly 30000 "children, who during the past twenty years had come under his care." Such are the opportunities which the author enjoyed, and in the work lying on our table which embodies the results of those opportunities, he has shown his own capabilities as a thoughtful, judicious, pains-taking and cautious writer, thoroughly skilled in the management of infantile diseases, and, what is not always met with in the same individual, capable of imparting his ideas to others, in an attractive lucid style.

The present edition differs from those which preceded it, in the addition, of one new introductory lecture, the second in the series, and of two by the same author, but inserted by the publishers, at its conclusion. The whole three lectures are on important topics. Thus the second of the series which follows the introductory one, and which may be regarded as a continuation of it, is "on the treatment of children's diseases," a most important subject; while we have already specified the titles of the last two, both of which are on matters of equal interest.

It will be seen by a glance at the subjects discussed in these three lectures how important they are to the practitioner, especially to the junior practitioner, although the senior may derive profit and advantage also from their perusal.

After laying down in his first lecture a series of important rules for the guidance of the physician in investigating the diseases of children, all of which are of the highest moment, the author proceeds in his second lecture to give general directions for their treatment, having chiefly reference to the nature and doses of the remedies employed, based upon the susceptibility of the little patients to their action, and he dwells at some length on the employment of bloodletting emetics and purgatives, blisters, and sedatives. On these points we propose briefly to follow our author, and see how far his precepts are applicable to our Canadian climate and the susceptibility of our young patients in it.

With regard to the *abstraction of blood*, it is judiciously observed that bleeding from the arm is scarcely admissible before the age of three years, in consequence of the smallness of the vein, and the fatness of the arm. Bleeding from the jugular is preferable, but the necessity of practising it is rarely required, except in cases of convulsions succeeded by profound coma, or acute inflammatory croup. In this country also, cases requiring this operation are also very rarely encountered; and here as in England, recourse is more usually had to leeches. On this point however the author observes that it is better, when the abstraction of a large amount of blood is demanded, to use a large number of leeches than a small number, and permitting the bites to bleed under some emollient application; because in the former instance we can always determine with tolerable accuracy, the amount withdrawn—two drachms to each leech—and arrest the operation at once; while in the latter, the quantity withdrawn is always unknown, and might be productive of alarming symptoms.

With regard to the mode of applying them, some important rules are laid down, among which, is that their application should never be entrusted to the hands of a nurse, but that the physician should himself supervise it; and after observing that large losses of blood are worse borne by the infant than by the adult, and that if syncope be induced its effects are not so transient, he proceeds to remark that the shock consequent upon large losses of blood shews itself not only as above stated, but also, not seldom, by inducing convulsions, even though the disorder for which they were applied depended upon congestion of the brain; and he illustrates this by a case in point, in which he had ordered a child labouring under cerebral congestion with convulsive twitchings to be leeched; the operation was entrusted to its nurse, and while the bleeding was going on, it was attacked by profound coma in which state it rapidly died. In this case the coma and death resulted from the too sudden withdrawal of blood; but the author remarks that had he, or under like circumstances a physician, been present, he would have noticed in time the supervention of the comatose symptoms, and prevented possibly their further development.

Dr. West next passes under review the administration of *mercury*. We do not agree with the author in some of his remarks on the exhibition of this remedy. Thus he observes that "the peculiar influence of mercury is exerted too slowly to control the first rapid advance of some acute diseases such as croup and pneumonia, though in both after previous depletion, and the administration of antimony, mercury often proves more serviceable." Perhaps in England it may be customary to treat all cases of croup by early depletion. Such practice is far from being the case, or always necessary, in this country. We have no hesitation in recording our conviction that not one in twenty cases of croup require depletion in this country, but that the usual treatment by a warm bath, and an emetic followed up by calomel, is in the very large majority of cases all that is required, provided the case be seen in time. After the prostration of the system produced by the warm bath and the emetic, calomel has been found to control the inflammatory action going on in the trachea and to prevent the formation of false membrane. And even in pneumonia, we should feel inclined to adopt the same treatment that we have repeatedly pursued, the use of antimony in nauseating doses, with calomel, a treatment which we have again and again employed, before resorting to depletion, a measure which we have by no means found to be invariably necessary. With us as in England mercury may be administered in large quantities to infants without the induction of its specific effects. We have, however, seen two cases of stomatitis distinctly produced by it. One of these cases was brought to the Montreal General Hospital as an outpatient during one of the periods of our attendance at that Institution; the other occurred in the practice of an esteemed late brother practitioner some years deceased. We have also seen two cases of Noma, both of which had been under treatment in this city, and although the disease was supposed by their parents to have been the effects of mercury, not a grain of it had been given to either. There can be no question that the diminished activity of the absorbent vessels is the cause of this apparent non-production of the constitutional effects of this

remedy; yet this by no means wholly explains the phenomenon, as its influence in controlling action in inflammatory diseases, whether seated in the serous or mucous tissues, can only be explained by such absorption.

Dr. West again states—"in early life mercury instead of affecting the mouth "usually acts very speedily as an irritant on the intestinal canal," and he points to the green stools as proof—and further on remarks "calomel acts as an "irritant on the mucous membrane of the stomach producing nausea and vo- "miting, and giving rise to so great a degree of depression as to necessitate its "discontinuance. We must observe that such results have never been witnessed in our experience. In cases of *cholera infantum*, in which the irritability of the stomach is extreme, we possess no more efficacious treatment than the administration of calomel, in repeated doses, and these by no means small. In some instances we have seen it act like a charm arresting the vomiting after every other remedy had failed. We scarcely remember having lost a case of infantile cholera, and we have had during a practice of about twenty-five years some hundreds, in which the most perfect relief followed the treatment by this medicine.

Again with reference to *antimony*. With regard to this medicine Dr. West condemns its indiscriminate employment as an emetic and diaphoretic preferring as its substitute Ipecacuanha, for the reason that its depressing influence on the system is less. In ordinary catarrh and in hooping cough, he gives a preference to the Ipecacuanha; in pneumonia, croup, and capillary bronchitis to antimony, because he considers it as only capable of keeping the inflammatory action in check. We have seldom resorted to emetics of antimony in cases of pneumonia and bronchitis, although we place great reliance upon it in small nauseating doses; but in croup we have most frequently found such beneficial effects from the Ipecacuanha, as to lead us usually to prefer it as the safer of the two, unless in extremely robust children. In fact in such cases we discriminate, for although in one case we found the antimony in its effects nearly as bad as the disease, the depressing influence having nearly reached the point of collapse compelling us to administer wine and ammonia to counteract that condition, yet we would not hesitate to administer it in cases in which we considered that its depressing influence over the vital powers could be borne.

And again with reference to *opium* and other medicines of the same class. We agree with the author that at no period of life is the demand for such remedies more called for, as at no other period is the nervous system so easily disturbed; yet are there none to whose action that nervous system is so susceptible. Dr. West believes that these dangers have their origin in three different causes, the employment of preparations of uncertain strength, the administration of over doses, or their too frequent repetition. Presuming that physicians would employ only preparations of known strength, and putting out of the question over-doses of the medicine, we come to the third source of danger, which according to the author is to be averted by giving "a larger dose of the remedy once or twice in the twenty four hours," or in other words once in twelve hours. We see much to object to in this recommendation; because if it is necessary to administer

opium at all, it is desirable to keep the system under its influence with the least possible quantity commensurate with the object intended to be carried out; an object which can only be properly secured by exhibiting small doses frequently repeated. We should be afraid to exhibit a dose whose influence would extend to twelve hours duration. Such an effect could be only that of narcotism, an effect too dangerous to induce, and such or something like it would, we apprehend, be the result of such a practice. Dr. West's precautions in administering this drug to infants are in certain cases so excellent that we cannot forbear quoting them. "It must be given charily in all cases where the system has been exhausted by the "previous disease or by the previous treatment. In all cases of cerebral excite-"ment the use of opium calls for great watchfulness. In severe diarrhœa too the "transition from a state of excitability of the nervous system to a condition "of coma is often very rapid in its occurrence; an overdose of opium may "hasten or induce this catastrophe, or even though it should not have this re-"sult, yet without great care we shall be at a loss to determine how far the "disease, and how far the medicine, has induced the symptoms. In mere "restlessness, unattended by severe pain, other sedatives are often preferable to "opium," &c., &c.

There can be no doubt that observant and cautious physicians have on numerous occasions wished to prescribe opium, but have been deterred by the uncertainty of its action. The only safe system on which to proceed is to commence, when a necessity for the drug is clearly manifested, with the smallest dose consistent with the age of the patient and gradually to feel the way to that maximum point which the patient will tolerate with safety. There are so many circumstances, besides the peculiar susceptibility of the infantile nervous system, which control or modify its action, such as idiosyncrasy, the nature of the complaint, the age, &c., that no rule beyond that laid down can be safely or advantageously followed. The danger always consists in effecting too much with it, more than we desire or than the necessities of the case require.

The last remedial agents noticed by the author are *Blisters*. For two reasons, 1st to obviate ulcerated surfaces, and 2nd to prevent dislodgement of the blister, thus blistering some other part, the author employs and prefers the blistering fluid, painted once or oftener over the surface, according to the amount of irritation which it is desired to induce. After vesication, the serum is evacuated by a needle, and the surface dressed by a layer of cotton, allowed to remain until it drops off of its own accord. The author adds that this method possesses an advantage over the common mode, that of enabling us after the lapse of three or four days to repeat the vesication on the same spot, a practice which could not be attempted except after a lapse of ten or twelve days, the period usually taken for the healing of a blister as commonly practised. He also strongly insists, that a common blister should never be kept longer applied than four hours, or what is better, kept applied only until the skin is well reddened beneath it, easily known by raising it from time to time, the subsequent vesication being permitted to take place under a poultice applied for the purpose. In very young infants, as a general rule, a blister should never be permitted to remain longer applied than two hours. In all such cases the danger to be apprehended from protracted blistering, is

the formation of ulcerated surfaces, which may prove exceedingly troublesome. A contingency which should also be kept in view is the fact, that in some diseases, such as measles for example, the skin is in such a highly excitable condition as to be peculiarly susceptible to their action, and therefore like consequences are exceedingly apt to follow.

It was our intention, and it would have been a pleasure to us to have followed the author into his lectures on croup, diphtheria, and the subjects which form the two last lectures in the volume; but our limits entirely preclude this. We have deemed the observations upon the remedies which we have noticed, so important to the junior practitioner that we thought it our duty to devote some space to their consideration, but that space has far exceeded the bounds which we had mentally assigned it. There is no part of the volume, no subject on which it treats which does not exhibit the keen perception, the clear judgment, and the sound reasoning of the author. It will be found a most useful guide to the young practitioner, directing him in his management of children's diseases in the clearest possible manner, and enlightening him on many a dubious pathological point, while the older one will find in it many a suggestion and practical hint of great value.

ART. XXXV.—*Announcement of Brighham Hall, an Hospital for the Insane.* Canandaigua, N. Y. 1860, ph. pp. 16, with a plate.

The foregoing is the title of a pamphlet which we lately received, announcing the establishment, in the State of New York, of a third Hospital for the treatment of the Insane.

Although the State of New York possessed two Lunatic Asylums, the one "the Bloomingdale Asylum" situated within the limits of the commercial metropolis, the other "the State Lunatic Asylum" situated at Utica, the accommodation furnished by these two Institutions has been found inadequate to the demand. A fact moreover appears from the pamphlet before us, of which we were not previously aware, that the supply of patients to the Bloomingdale Asylum has been furnished mainly by the affluent, that to the State Asylum by the poor; the consequence which has followed this state of matters is that the State pecuniary grant has been for years past disallowed to the former, and it is supported, independently of its own means, by its patients; while the latter has never received any State pecuniary appropriation, and has been sustained mainly by charitable contributions.

It furthermore appears, that from the opening of the Bloomingdale Asylum in 1821 to the present year fully 6000 insane persons have been admitted within its walls, while the State Asylum has given admission to the same number of patients since the year 1843, the year in which it was first thrown open.

The accommodation, however, furnishable by these two valuable Institutions has been found inadequate, and consequently a third one was opened a few years ago in Canandaigua. This village was selected in consequence of its position. "It was conceded," says the report, "that the existence of an Asylum in the

"Eastern and in the middle third of the State, precluded a location in either "of these localities; and predetermined that any additional hospital should be "located in its Western third." Other accidental circumstances conspiring located the Hospital at Canandaigua. The village contained a building suitable as a central edifice. It received its first patient in 1855. In 1856 the North wing was completed and received patients. An Act of Incorporation was asked and obtained in 1859, and in the following year the South wing was finished, thus completing the edifice. Its name, Brigham Hall, was given to it, in memory of Dr. Amariah Brigham, an early and exceedingly talented Medical Superintendant of the State Lunatic Asylum, and whose name as a writer stood among the highest on this Continent in this peculiar department of Medical Literature.

With regard to the operation of the Hospital, we extract the following information. "From the opening of the Institution to the 18th February 1860 there "have been received one hundred and thirty nine patients, of whom forty two "have been discharged recovered; thirty improved; seventeen unimproved, and "ten have died. Forty remain under treatment, several of whom are nearly "recovered."

The general management of the Hospital is vested in a board of three mamagers.

And the Medical or professional charge is entrusted to Dr. George Cook and Dr. John B. Chapin, both of whom bring to the discharge of their duties an extensive experience acquired in the practice of the State Asylum at Utica.

This institution seems mainly designed for the accommodation of patients in easy circumstances of life, although a limited number in indigent circumstances will be admitted at a rate equal to the cost of their support.

ART. XXXVI.—*Therapeutics and Materia Medica: a systematic treatise on the action and uses of Medicine Agents, including their descriptton and history.* By ALFRED STILLE, M. D., late Professor of the Theory and Practice of Medicine in the Medical Department of Pennsylvania College, 2 vols., 8vo, vol. 1, pp. 813. Vol. 2, pp. 975. Philadelphia: Blanchard and Lea, 1860.

We scarcely could have imagined that any one could have been found bold enough to enter a field of labour consecrated by the name of Pereira, whose work is a splendid monument to his genius, and which almost exhausted that domain of medical literature on which it treated. It is well known that the dispensation of a Higher power did not permit him to complete his labours, although a considerable portion of his second volume was prepared by his hand. That second portion was posthumously published under the supervision of two friends Drs. Taylor and Rees, who also completed it. The work before us differs, in some respects materially, from that of Pereira, dwelling less upon the description and chemical and natural history of the articles treated of, being equally full upon their pharmaceutic preparations and physiological influences, and a great deal more extended on their therapeutic employment, thus adapting

it, in a higher degree, if possible, to the wants of the student and the practitioner, while Pereira's will be found better suited to the pharmaceutist, although at the same time well serving the purposes of the medical jurist and physician. Indeed we regard both works as occupying highly distinguished positions in medical literature, the object of neither being exactly alike, yet both admirably adapted to the ends which their respective authors contemplated.

In the detail of the therapeutic application of the various remedial agents, as they pass consecutively under notice, the work before us is particularly rich. The author has justly observed, that it is to experience, and experience only, that we must turn and trust for the application of remedies to particular conditions of suffering; and as experience is therefore our only guide, a most extensive field is at once opened for investigation, reaching from the present period backwards to times of the remotest antiquity. It is true that amidst the mass of material that such an examination must disclose, much will be found utterly valueless, but which superstition or credulity in former days may have invested with almost magic powers; while on the contrary there will be met with some remedial agents, few though they may be, whose efficacy in the treatment of diseases has enabled them to withstand the test of time, and whose value and importance have descended to us, and been thoroughly admitted, although they may not pass current in our day under the same name. A couple of instances of this will suffice. Thus Homer, in his fourth Odyssey, if we remember rightly, alludes to the nepenthe which Helen gave the guests of Menelaus. This has been well ascertained to be a production of the poppy, now known as opium; and so also was our present remedial agent, squills, known to the Egyptians under the name of the Eye of Typhon, and both these remedies were used in those days for the same purposes as now. No! It is not the experience of any one individual, how skilful soever he may be, that establishes the efficacy of a medicine; it is the conjoined testimony of many to its effects, which determines its true value, and proclaims it entitled to confidence. Such has been the case with regard to all our best remedial agents. Their efficacy has been confirmed by time, the touchstone of their value, and in their application to disease, independently of our own observation, however extended or limited it may have been, we have that also of all our predecessors.

In describing the therapeutic influence of the various remedial agents, Dr. Stillé has avoided entering into the various speculations which have been advanced by various parties from time to time, to explain their *modus operandi*; but in place of this, and instead of advancing theories of his own, he has given us a laborious comparison of actual results obtained from their administration, a point of far greater importance to the medical man in active practice who naturally cares more for these results than for finely spun theories built upon them. The work therefore possesses a substantial practical value to the physician, such as he will meet with in few other publications of the kind. In fact this portion of the work is most laboriously executed, and bears its own testimony to the severe industry of the author.

"His authorities," to use his own words, "are not only the classical ones, "but modern writers of the highest reputation in the Italian, French, German

"and English languages, whose observations have been preserved in special "essays or in that repository of facts, the periodical medical literature of the "present century."

We cannot but congratulate Dr. Stillé in having produced a work worthy of his own name and that of the American Medical Profession. We know of no more useful work to the physician in active practice who desires to know the full therapeutic influence of any special remedy, the modes in which it may be applied, and the uses to which it has been put; in these volumes he will find all that he seeks. Nor are the publishers less worthy of commendation. The volumes are handsomely bound, and the typographical execution in the highest style of that art, the whole reflecting the greatest credit upon the enterprise of the firm under whose auspices the work has been laid before the Profession.

ART XXXV.—*An Epitome of Braithwaite's Retrospect of practical Medicine and Surgery, containing a condensed summary of the most important cases, their treatment and all the remedies, and other useful matter embraced in the forty volumes; the whole alphabetically arranged and supplied with an addenda comprising a table of French weights, &c., &c.* In five parts by WALTER S. WELLS, M. D. Parts 2, 3 and 4. 8vo, New York, C. T. Evans.

We are most happy to perceive, by the reception of Parts 2, 3 and 4 of the above truly valuable and laborious work, that it is steadily progressing towards completion, and that the promises of the author and publisher have been thoroughly fulfilled. The more we have examined the work, the more are we persuaded that it is one without the possession of which no physician or surgeon in active practice can well get along. It is a perfect treasury of knowledge in medical and surgical science, and any one who will take the trouble of examining it however slightly will perceive at once, how large a mass of valuable literature, and this too the latest, is accumulated in small space upon any given subject.

As far as we have examined, and we have done this in a critical manner, we can testify to the fidelity with which the author has performed his condensations of the various papers which consecutively fell under his notice. This is not always a task of facility, and to say that it has been done well in this instance, is but awarding to the author but a small amount of that credit which is in reality his due, and which should be generously accorded to him. Every member of the profession should possess a copy of the work, even although he possessed the original, as it not only tends to serve the purposes of a general index, but also to economize his time by presenting to him within narrow limits all the information in condensed form which the original itself contained. On such grounds we heartily recommend it to the profession of these Provinces, persuaded that those who obtain a copy will agree with us, that they never on any previous occasion more worthily invested a five dollar bill, the price asked for the five volumes. We anticipate with satisfaction the completion of the work, the appearance of the fifth and concluding part.

PERISCOPIC DEPARTMENT.

MATERIA MEDICA.

PERSULPHATE OF IRON AS A HÆMOSTATIC.

M. Monsel, of France, first proposed the use of this excellent hæmostatic, and as its use is becoming more general, we give our readers *his* process for its preparation:

"Place in a porcelain capsule 100 grammes of distilled water, and ten grammes of sulphuric acid; raise the mixture to the boiling point, and then add fifty grammes of proto-sulphate of iron. After complete solution of the latter, pour, in small quantities, into the boiling liquid, sixteen grammes of nitric acid at 35°. When the rapid discharge of orange-colored vapors has ceased, add, in proportion, fifty grammes of the proto-sulphate of iron, the solution of which will produce again reddish fumes, and will cause the excess of nitric acid to disappear. The volume of the liquid is then raised to 100 grammes by the aid of distilled water, cooled, and filtered."

Monsel suggests that 100 grammes of this solution be treated with a few grammes of linseed oil, and that the mixture be shaken four times in twelve hours. There is thus obtained a perfectly neutral solution, having no nitrous odor, and susceptible of preservation for a very long time. The solution is limpid, of a very dark brownish-red, inodorous, and with an extremely astringent but non-caustic taste. It marks 45 degrees, of the *pesse-sels*. When concentrated by boiling it assumes the consistence of honey and if in that condition it is spread in thin layers on plates of glass, and dried at a temperature of 100° Fah., it can be obtained in reddish-yellow scales, transparent, like those of the citrate and tartrate of iron.—*Journal de Phar. et de Chim.*, and *Boston Med. and Surg. Journal.*

CHLORODYNE: ITS HISTORY, PREPARATION, PROPERTIES, THERAPEUTIC EFFECTS, DOSES, &c.

History.—Chlorodyne was invented in the year 1848 by Dr. Browne, whilst officiating in his medical capacity during the prevalence of cholera and diarrhea amongst our troops in India, and was introduced to the notice of the faculty in this country by him as "combination of perchloric acid with a new alkaloid."

Preparation.—From Dr. Ogden's analysis it appears to be composed as follows:—Chloroform, six drachms; tincture of capsicum, half a drachm; oil of peppermint, three drops; muriate of morphia, eight grains; perchloric acid, twenty drops; Steele's hydrocyanic acid, twelve drops; tincture of Indian hemp, one drachm; treacle, one drachm. Dissolve the morphia in the perchloric acid; then add the tincture hemp., capsicum, peppermint, and chloroform, and lastly the treacle and prussic acid.

Properties.—Chlorodyne is a volatile liquid, possessing a pungent smell and taste. It is soluble in alcohol, but insoluble in water; but may be conveniently administered in that liquid by suspending it in a little mucilage. The alkalies and alkaline salts decompose it. In color it is dark brown, and in weight equal to twice its bulk of water. It is anodyne, sedative, diaphoretic, astringent, antispasmodic, diuretic, &c. Unlike the preparation of opium it does not produce headache, giddiness, prostration of strength, nor stupor; but in large doses, and from a constipated state of the bowels, it is liable to produce nausea, which in the former case may be relieved by a small dose of sal volatile, and in the latter by recourse to aperients.

Therapeutic effects.—The changes produced by this preparation on the system are: first, a gentle heat at the stomach, followed by a general glow and total absence of

pain; second, a calm and refreshing sleep; and third, an increase in the pulse, from a "small, weak, thready, hurried, or bounding one to a full, yielding, elastic, natural sort of one, decreasing in frequency of beats as well as resistence to a healthy condition."

Of its powers in the cure of consumption Dr. Stonehouse remarks:—"The cases (among others) in which I have employed it have been twelve cases of phthisis; eight of these patients have been examined by other medical men, and had been regarded as genuine cases of consumption, so that the nature of the disease does not rest upon my testimony alone. They were all well-marked cases; for I do not mention several others in an incipient stage. Two of the cases were in the last stage—*i. e.*, cavities had formed in the lungs; two others were bordering upon this stage. The remaining eight were in the second stage, that of softening; in five of these hæmoptysis was a prominent symptom. All these cases have done, or are doing, exceedingly well. Five of them have quite recovered; the others, with one exception, are in a fair way towards recovery."

Doses.—The dose of this preparation must be regulated according to the nature of the complaint. As an anodyne for febrile, inflammatory, or neuralgic affections, the dose is from ten to thirty drops; diaphoretic in cases of coughs, colds, &c., ten to twenty drops; sedative in consumption, &c., twenty to fifty drops; antispasmodic in gout, rheumatism, &c., twenty to forty drops; astringent in cholera, diarrhea, &c., fifty to one hundred drops. It is best administered on lump sugar, and given at intervals from every half hour to every four hours.—*London Chemist and Druggist.*

ON THE IODIDE OF THE CHLORIDE OF MERCURY IN THE TREATMENT OF SKIN DISEASES, AND ESPECIALLY OF COUPEROSE AND ACNE.

By M. Al Devergie.

This preparation, which possesses very powerful properties, was introduced by M. Boutigny, about fifteen years ago, for the treatment of couperose, acne, and other skin diseases which are very obstinate, and often irremediable by ordinary means. In these cases it is looked upon by many as a specific; but its chemical composition and therapeutical effects have not been studied with sufficient accuracy. The action of iodine on protochloride of mercury was first investigated by Plache and Soubeiran, (*Journal de Pharmacie*, t. xii. p. 651;) the product which they obtained presenting powerful escharotic properties. By varying the proportions of iodine and of protochloride, however, different compounds may be formed; and chemists have now ascertained that the so-called iodide of the chloride of mercury is not a definite chemical substaenc, but is a mixture of the chlorides and iodides of mercury, and generally consists of the bichloride and biniodide of mercury along with the protochloride. Such appears to be the composition of the substance manufactured by M. Boutigny, who, however, keeps his process secret. M. Devergie recommends the process of M. Dannecy, as yielding a product similar to that of M. Boutigny. Equal equivalents of iodide and bichloride of mercury employed, dissolved in alcohol, which retains a great part of the bichloride in solution, and the salt which separates (iodide of the chloride) in this case consists of a large proportion of biniodide, and a very small quantity of the bichloride, mixed with an excess of calomel. Prepared in this way, the iodide of the chloride, like that furnished by M. Boutigny, is much less violent in its action than either the biniodide or the bichloride alone would be in the same dose.

M. Boutigny employs his preparations externally in the form of an ointment, internally in the form of pills or syrup. The formula of the pommade de Boutigny is: Axunge, ℥j; iodide of the chloride of mercury, 12 grains—but more recently he has increased the proportion of the iodide of the chloride to 16 grains, and the ointment, of this strength, is now usually employed. The pills contain about one-fifth grain in four pills.

When applied to the skin, this ointment usually produces, after the second or third application, a feeling of heat and smarting, which lasts during most of the night if the pommade is used in the evening. Next day, if the pain has not been severe, the skin is merely reddened; but if the irritant action has been fully developed, the red surface is covered by an immense number of minute serous vesicles, which quickly dry up, leaving an epidermic crust. In most cases, the inflammation which is excited subsides rapidly, so that the application of lard or cold cream, for four or five days, allows the skin to return to its natural condition. Such are the usual results; but the effects, of course, vary with the strength of the preparation and the degree of sensibility of the skin—circumstances which must be attended to in the treatment of different cases. M. Duvergie's mode of application is to spread the pommade, in very thin layers, uniformly over the skin, by means of gentle innunction with the point of the finger, for about one minute; this is repeated every twenty-four hours for two, three, or rarely four days, and then stopped; the inflamed surface is next covered with lard or starch powder for three or four days, till the excited action subsides, and the application of the ointment is then renewed as before. This treatment is continued for five, six, or eight months, or even one or two years in case of relapse. It is the general opinion, that to obtain a complete cure, the application must be repeated till the strong ointment, containing sixteen grains of the iodide of the chloride, ceases to exert any action on the skin; but M. Duvergie considers the cure established when the skin is clear of eruption, and the ointment produces only a third or fourth of its previous effects. It is especially in couperose, a disease always difficult, and sometimes impossible, to remedy by ordinary means, that the iodochloride ointment exhibits the most remarkable effects. When the disease has not reached the tuberculated stage, it frequently cures it without requiring so long as six or eight months of treatment. M. Devergie relates a striking example of this in the case of an actor, who, in consequence of intemperance, had his face so blotched and disfigured that even with the assistance of paint he could not venture to appear upon the stage, and had to give up his engagements. In a few months he was completely cured. Although the cases are not always so satisfactory, M. Devergie strongly recommends the use of the iodide of chloride in pommade as generally a very successful means for the treatment of couperose. In acne, generally, it does not always suit. It succeeds least in A. sebacea and punctata; A. indurata yields most easily, and next to it A. miliaris. The acne rosacea does not usually require this treatment at all. In all these forms of acne, sulphurous baths and other measures are requisite. In mentagra and chronic lichen, it is not more successful than other analagous remedies; in lupus and eczema it does not appear to do any good. With regard to the mode of action of the iodide of the chloride, M. Devergie holds very decided views. He denies entirely its specific action, and maintains that it cures by its topical effects only, and not by any influence on the constitution. He strongly disapproves, therefore, of the internal use of the remedy as quite unnecessary, and as likely to give rise to salivation, and to injure the general health. According to his view, the cure is effected locally, by a process of substitution. The iodide of the chloride, being a powerful irritant, induces an acute inflammatory condition, which takes the place of, and, as it were, substitutes itself for, the chronic subinflammatory action of the disease; and by changing the mode of vitality of the tissues, promotes a return to the healthy state. The application of blisters in chronic inflammations of the skin is a common example of the same principle in treatment. Whatever may be the value of this theory, the general view is important, that it is merely in virtue of its stimulant or irritant properties, exerted locally, and not by any specific action, that the cure is accomplished. Finally, M. Devergie expresses the wish that in pharmacy some uniform method should be adopted of preparing the iodide of the chloride of mercury, so that it may be procured always of the same strength, and may be introduced into the therapeutics of legitimate medicine.—(*Bull. Gen. de Thérap.; Edinburgh Medical Journal*, December 1859.)

ON THE EMPLOYMENT OF IODIDE OF POTASSIUM IN DISEASES OF THE BRAIN IN CHILDREN.

By JOHN COLDSTREAM, M. D., F.R.C.P., Edin.

It is now upwards of twenty years since iodide of potassium was commended by Rœser and others, as a remedy of special power in hydrocephalus. It is surprising how few seem to recognize its value, and what slight references are made to its employment in the various works on the diseases of children. In all cases when, from the course of the symptoms, there is reason to believe that the central organs of the nervous system, or their envelopes, are in any degree affected with strumous inflammation, (tubercular cerebritis, or meningitis,) or its consequences, after moderate purgation, the writer is in the habit of employing the iodide of potassium in doses of from hlaf a grain to three grains, every three or four hours, in some carminative water, and continuing it for many days, according to the symptoms, or until convalesence is fully established; and with the occasional use of blisters to the shaven scalp, he believes he has produced more prompt and decided effect upon the disease than by any other treatment. When the opportunity has been afforded of commencing the use of this remedy early, it has appeared to arrest the progress of the disease *rapidly*, so that the effects of effusion, indicated by squinting and convulsions, have not supervened. In less favorable circumstances, where considerable prostration had succeeded great febrile action, where starting and squinting had become prominent symptoms, in not a few instances, the free use of iodide of potassium has been followed by amendment and recovery. In such cases it should be given in large doses, even to four grains several times a day, to children of from four to eight years of age.

The medicine is very seldom refused by the patient, nor does it increase the nausea so frequently existing in the earlier stages of the disease; nor has it induced salivation, which seems sometimes to follow its use in other ailments. Although it is more especially useful where there exists more or less of the scrofulous diathesis, yet it has been found of service in cases where no taint was present.

The writer is not prepared to assert that this agent is more useful than calomel in *all* cases of inflammation of the brain and its appendages. When we have to treat robust and full-blooded children, in whom there is reason to believe that the threatened disease of the nervous system stands more or less directly connected with preceding disorder of the digestive organs, there is no doubt of the superior efficacy of the mercurial treatment, combined with antimonials and salines; but when, after having duly administered these remedies, symptoms of cerebral disorder continue, the iodide should then be employed. The writer, in concluding, is satisfied that the iodide of potassium never produces any bad effects, though it may fail to do good.—(*Edinburgh Medical Journal*, Dec. 1859.)

GLYCEROLE OF LEAD.

The following is suggested as a substitute for Goulard's cerate. This cerate, as is well known, becomes speedily rancid, and in that state is more irritating than soothing to inflamed surfaces. The substitute does not change, is easily washed off with water, and can be reduced to any desired extent, for the purposes of a wash, with rose or distilled water:—

Pure glycerine, ...	13½ oz. (fluid).
Solution of sub-acetate of lead, ...	2½ oz. "
Camphor, ...	1 dram.

Triturate the camphor into powder, with a few drops of alcohol; add the glycerine; heat in a water-bath until the camphor is dissolved; when cool add the solution of lead,

and shake well together. These proportions are those for Goulard's cerate, substituting glycerine for the oil and wax.—*Journal and Transactions of the Maryland College of Pharmacy.*

PEPSINE IN THE SEVERE AND OBSTINATE VOMITING OF PREGNANT WOMEN.

M. L. Corvisart has of late advocated the use of pepsine to allay the very dangerous symptoms connected with the uncontrollable vomiting of pregnant women; and it would appear that excellent results have already been obtained. In *L'Union Médicale* of the 17th inst., we find two remarkable cases, reported by M. Baudot, in which the first dose of pepsine immediately relieved the patients, who had been brought to a very low ebb by constant vomiting.—*Boston Med. Journal from Lancet.*

MURIATE OF AMMONIA IN NERVOUS CEPHALALGIA.

By Prof. Barallier.

Professor Barallier, of Toulon, reports that within the last three years he has administered this substance in 259 cases of nervous cephalalgia, and with success in 202 of these. He gives forty-five grains, combined with mint-water and syrup of orange-peel, divided into three doses, to be taken at intervals of half an hour, amendment commencing after the first dose, and the third frequently not requiring to be taken. To prove effectual, however, the remedy should not be given at the very commencement of a paroxysm, but when it has accquired great intensity. This agent not only gives relief to the urgent pain of the paroxysms, but, after having been had recourse to on several occasions, diminishes the number and frequency of these. To be of use, it must not be indiscriminately used for every cephalalgia; and the result of the analysis of M. Barallier's experience leads to the following conclusions: 1. The muriate almost constantly dissipates paroxysms of idiopathic migraine, and of migraine consecutive to too abundant menstruation. 2. It is powerless in the hemicrania which is dependent upon irregularity or suppression of the menses. 3. It is tolerably successful in cranial pains dependent upon disorder of the stomach, and in the accidental cephalalgia frequent in women and feeble persons under the influences of sudden changes of the atmosphere, prolonged intellectual labor, or moral emotion. 4. It operates beneficially in cephalalgias consecutive to repeated paroxysms of intermittent fever; those which are observed during the decline of severe fever, and in the course of the irritative period of typhus.—*Bull. de Thérap.*, February, 11, 1860.)

PILLS OF CARBONATE OF AMMONIA IN CHRONIC BRONCHITIS.

By Dr John Williams, of Cork.

Dr. Williams recommends the following formula for administering carbonate of ammonia in pills, which, he says, are of great service in chronic bronchitis, and especially in those cases where the bronchial secretion is viscid and expectorated with difficulty:

℞.—Ammoniaci, gr. ij;
Pulv. Ipecac. gr. ½;
Morphiæ Mur. gr. ⅙;
Ammoniæ Carb. gr. ij;
Mucilaginis Acaciæ, q. s.
Misce. Fiat pilula.

The pills should be at once coated with a varnish of balsam of Solu, dissolved in chloroform, and they should afterwards be kept in a bottle,—(*Pharmaceutical Journal*, London, February, 1860.)

ALUM LOZENGES IN AFFECTIONS OF THE THROAT.

By M. Argenti.

M. Argenti of Venice, proposes as a substitute for alum gargles, sugar, and tragacanth mixed up with diluted laurel-water so as to form lozenges, each containing a suitable dose of alum. The mass is to be well manipulated, and after division, to be put on a sheet of paper and dried by a gentle heat. The lozenges keep well and form an agreeable medicament, which, by aid of the saliva, becomes effectually applied to the parts. A pharmacien of Paris has, for some time past, prepared chlorate of potassa in the same manner.—*Bull. de Thérap.*

BORAX IN DIPHTHERITIS.

By M. Leriche.

M. Leriche, having derived great advantage from the employment of large doses of borax in croup and the various pultaceous affections of the buccal mucous membrane, determined upon giving it in diphtheritis, which was prevailing in his locality. He relates two cases, occurring in adults, wherein its employment was quite satisfactory, in one of which twenty-six drachms were given in four days.—(*Revue Mèdic.*)

MEDICAL JURISPRUDENCE.

A CASE OF EMPHYSEMA OF THE LUNGS IN A STILL-BORN CHILD; WITH OBSERVATIONS ON THE HYDROSTATIC TEST.

By Prof. Hecker.

Professor Hecker reports a rare and interesting case in which he found the lungs of a still-born child in an emphysematous condition. The post-mortem examination was made six hours after the birth of the child; not the least sign of putrefaction could be discovered, so that the presence of air in the lungs could not be ascribed to this cause. On opening the thorax the unusual appearance of the lungs attracted immediate attention; instead of having to be searched for at the bottom of the thorax, they filled out that cavity to its greatest extent, and the left lung covered the pericardium in a manner only observed in cases where respiration has been completely established; their colour was not reddish brown as that of fœtal lungs, but much lighter, greyish red; their touch was spongy. Both lungs swam completely, and on being put to the bottom of the vessel, readily came to the surface again. They were well filled with blood, so that on cutting into the parenchyma foamy blood escaped; in many places on their surface, but particularly in their margins, the unmistakeable signs of emphysema existed; it resembled that produced when in a case of asphyxia the lungs are incautiously inflated by means of an elastic catheter introduced into the windpipe, and the child has perished soon after the operation; large vesicles filled with air alternated with perfectly white spots. The windpipe, down to the smallest bronchi, was empty, and its mucous membrane somewhat reddened. The heart contained much dark, coagulated blood; its vessels, as well as the fœtal communication, were normal. As an isolated putrefaction of the lungs which might have caused a development of air could not be assumed, Professor Hecker ascribes the appearance of the organs to intense respiratory efforts made in the uterus. The liquor amnii had been very early discharged, and the child was thus enabled to breathe for seventeen hours; furthermore, frequent examinations with half the hand had been made during labour, so that air was repeatedly admitted into the

uterus. As motive for respiration no other circumstance can be adduced, as the close embrace of the child by the uterus after the discharge of the liquor amnii; another cause which might have given rise to disturbance in the placental circulation could not be detected.

This case is of particular importance in a medico-legal point of view, as the lungs of this child, which had not breathed at all after birth, were capable of swimming. It invalidates the statement of Casper, that there exists not a single well-observed and indubitable case where emphysema was spontaneously developed in the fœtal lungs, and that it was therefore not admissable in medico-legal practice to ascribe the floating of the lungs of new-born infants to this cause.

As counterpart to the case reported above, Professor Hecker communicates another, which is without a parallel. In a child which after birth had breathed and screamed loudly, and which died six hours afterwards, the lungs contained no trace of air and sank completely in water. Their colour was that of fœtal lungs, and even a most scrutinizing examination could not discover dilated air-cells in them.—*Virchow's Archiv für Pathologische Anatomie und Physiologie.*

POISONING BY CYANIDE OF POTASSIUM.

Dr. A. Schauenstein, in a communication on poisoning by cyanide of potassium, gives an account of five cases of death by the cyanide. The author, who is a judicial chemist comments upon the great increase of deaths by suicide through the agency of this poison. Thus in Vienna, from 1851 to 1856 only two poisonings were noted, one of which was doubtful; while from August 1857, to December, 1858, no less than five cases came under the personal observation of the author. In proportion to the increase of deaths from the cyanide there was a corresponding decrease of deaths from arsenic.

Dr. Schauenstein relates at length three of the cases observed, and in brief the pathology of the two others. In all cases the death seems to have been sudden. In one case in a young girl, strong tetanic spasms came on directly after the poison had been taken and death took place in less than an hour. In the second case, occurring in a young man, death took place almost instantly, and with no striking symptoms. The third case was similar; no note of the symptoms in the remaining two cases is given, but Dr. Schauenstein observes, that in several of the cases death took place suddenly, as in apoplexy.

In all the cases a post-mortem examination was conducted, but the appearances observed are considered by the author as offering nothing very characteristic. They were:—

(*a*) The brain contained more or less blood.

(*b*) The blood in the cavities of the heart dark, and of thick consistency.

(*c*) The condition of the stomach varies. In one case the mucous surface presented no particular colouring. In the case where life was prolonged nearly an hour the mucous membrane was slightly red, but offered no other extraordinary appearance. In another case, the death being very sudden, the mucous membrane was of a dark-red colour, swollen, and in places covered with numerous bloody points; the contents of the stomach were also of a blood-red colour: the two remaining cases of the five presented similar appeartnces in a less degree.

(*d*) The smell of prussic acid in the stomach was very evident in four of the cases. But in one case, on account of the quantity of undigested food in the stomach, the smell remained hidden entirely.

(*e*) The reaction of the contents of the stomach was strongly alkaline, and in every case chemical search proved without doubt the presence of prussic acid; but formic acid was also constantly found, showing that prussic acid in the stomach is transformed into formic acid in many cases.

This latter fact, one of great interest, was originally pointed out by Dr. Schauenstein in the *Wochenbl. der. Zeitschrift der K. K. Gesellschaft der Aerzte.*

Dr. Schauenstein, in commenting on the cases, opines that there are no true and distinguishing pathological indications by which the effects of the poison can be safely pronounced.

He further observes that the chemical detection may become equally difficult in instances where, from the body having been dead several days, or having undergone a rapid decomposition, the poison has been decomposed.—*Zeitschrift der K. K. Gesellchaft der Aerzte zu Wien.*

DETECTION OF BLOOD STAINS.

By M. Brucke.

In medico-legal inquiries, it is often of the utmost importance to determine the character of red spots on linen or steel, supposed to be blood stains. M. Brucke has recently published the following method, as being superior to those in common use:—

"Wash the spot with cold distilled water. To the reddish liquor thus obtained add a solution of sea salt, and evaporate to dryness, in vacuo, over a vessel containing sulphuric acid. Examine the dry residue well through a microscope, in order to verify whether it contains any matter that might be mistaken for Tetchman's crystals; then add a little highly-concentrated acetic acid; evaporate again to dryness; moisten the residue with water; and then, if there really be blood in the spots, the microscope will reveal unmistakable crystals of hæmatin."—(*London Lancet*, January, 14, 1860.)

TOXICOLOGICAL REMARKS ON NITRO-BENZINE.

By Dr. Casper.

Nitro-benzine or nitro-benzide, discovered by Mitscherlich in 1834, is obtained by treating benzine with fuming nitric acid; it is a liquid substance at the ordinary temperature, yellow, of sweet and pleasant taste, and exhaling a strong odor of bitter almonds. It crystallizes at + 3 degrees, and dissolves easily in alcohol, ether, and the oils, very little in water. Its composition is represented by the formula, $C^{12}H^{5}$ $CezO^{4}$.

The substance is very generally applied in perfumes, as a substitute for the essence of bitter almonds and hydrocyanic acids; the druggists sell it in large quantity, and as its price is not very high, there is reason to fear that sooner or later it may give rise to cases accidental or criminal poisoning. Dr. Casper has ascertained by experiments on the rabbit and dog, that it possesses very energetic poisonous properties.

The blood and the different organs of animals poisoned by nitro-benzine emit an intense odor of bitter almonds. But as most toxicologists of the present day assume that this odor is sufficient to characterize poisoning by prussic acid, it is important to be aware of the fact, that in a case of poisoning by nitro-benzine the same characteristic circumstance is observed. Further investigations will, no doubt, serve to establish differential marks. M. Casper has noticed, in this respect, that the odor of nitro-benzine persisted, in his experiments, for several days after death, while hydrocyanic acid commences generally to decompose on the second day. It will be useful to bear this difference in mind.—(*Vierteljahresschrift für gerichtliche and öffentliche Medizin*, t. xvi. p. 1, and *Gazette Hebdomadaire*, February 24, 1860.)

SURGERY.

PUNCTURE OF THE ASCENDING AORTA BY A NEEDLE: DEATH WITHIN TWO HOURS.

(Under the care of Mr. SKEY.)

Such a case as this is full of interest and importance in a medico-legal point of view, and it also affords a practical lesson of the extreme impropriety of wearing pins or needles about the chest in the vicinity of the heart. A wound of the aorta by a needle has probably not been before noticed, although there are recorded instances in which the heart has been wounded by such an instrument. Dupuytren relates one, of five or six wounds of the right ventricle, from a saddler's needle, the patient living twenty-eight days, but dying from cerebral disease. Mr. Holmes Coote has recorded an example—a lunatic who died from acute pericarditis, caused by the introduction, over the region of the heart, of a needle, which made its way through the right ventricle, and was found sticking in the muscular substance. He also met with two other cases—one in which a man pushed a needle into the heart of a girl; the other a wound of the heart of an infant, caused by the nurse (a little girl) pressing it to her bosom. In these latter, death ensued from hæmorrhage.

For the notes of the following case we are indebted to Mr. Wm. H. Farrington, house-surgeon to the hospital.

S. H——, aged nineteen, a healthy-looking young woman, walked into the surgery, about two a. m., on the 3d instant, and stated that she had received a push which had driven the hook of her dress into her chest, about twenty minutes previously. Mr. Farrington, the house-surgeon, examined her chest, and perceived on the right side of the sternum, between the second and third costal cartilages, the skin to be projected forwards, about the eigth of an inch, by some foreign body, which received a pulsation synchronous with the action of the heart. A small puncture, such as would admit a pin, was the only wound visible, and situated about a quarter of an inch from the projection. There was a single small spot of blood on her chemise. On questioning her, she said it might possibly be a needle, as she sometimes carried them stuck in her dress. She complained of a slight sense of fulness in her throat, and pain in the right shoulder. Respiration was slightly accelerated. Pulse 120, which might have been due to excitement. She said if he would take it out she felt quite well enough to go home, and it was with great difficulty that she could be persuaded to remain in the hospital. She walked to the ward, and, on arriving there, complained suddenly of great pain in her chest, and faintness. Mr. Farrington went to her a few minutes afterwards and found her in great pain. Her countenance was livid, and expressive of very great anxiety. The projection on the right of the sternum still remained, though now quite motionless. The action of the heart was extremely feeble, the radial artery being scarcely perceptible. Respiration deep and slow. On ammonia being applied to the nostrils the pulse slightly revived. A small incision was now made over the projection, and, with some little force, a piece of a needle, an inch and seven-eighths long, was extracted, the outer end being slightly bent, and the part containing the eye broken off. It took a direction obliquely under the sternum, and rather downwards. Her condition gradually became worse. Brandy was given to her, but she could not swallow it. Delirium and tossing about came on; the heart became more and more oppressed, the sounds becoming more feeble and distant; the pulse occasionally quite imperceptible, and then returning; respiration deep and at long intervals. She gradually sank, and died about an hour after her arrival at the hospital.

Autopsy, thirty-two hours after death.—(Conducted under the superintendence of Mr. Skey.)—The seat of puncture was found to be just below the second costal cartilage, and close to the right edge of the sternum. Two small punctures were found in the

pericardium, their situation nearly corresponding to the external one. The pericardium was fully distended, containing about a pint of blood, the serum having separated from the clot, which quite encased the heart. Beneath the external coat of the aorta, just at its commencement, was an extravasation of blood, about the size of a shilling. About half an inch above the aortic valves were three or four punctures, such as would have been made by the needle, through the whole thickness of the outer wall of the artery, and within a quarter of an inch of each other, one puncture being about one-sixteenth of an inch long, as if enlarged by the pulsation of the artery while the needle was fixed in it. Both lungs were much congested, and contained very little air. The other organs were healthy.—*Lancet.*

RUPTURE OF THE HEART.

By Wm. T. Hamilton, Esq., M.R.C.S.

Cases of rupture of the heart being exceedingly rare, and the following so well exemplifying what might be expected to occur when that rupture is small, I feel desirous of communicating it to the profession, as I consider it one of great interest:—

W. B——, aged sixty-three years; a shoemaker by trade; of moderate size and development, and temperate habits; had always enjoyed good health to within the last two or three days, when he complained of slight uneasiness or oppression at his chest, coldness of the extremities, and shiverings. Having been employed to carry two small parcels, not weighing more than seven pounds, to the house of his employer, he had not proceeded many hundred yards when he was observed to fall down in the road in an unconscious state. He was speedily raised by a passer by, to whom he expressed his wonder at what had occurred, walked over with a staggering gait to the side of the road without any assistance, and then laid down. Happening to be passing at the time, the man presented all the appearances of being in a deep fainting condition, which it is unnecessary for me to describe, and in that state he continued for a few minutes, his death being preceded by a slight convulsion. Such is the brief history of the case.

Having received an order from the coroner to make a post-mortem examination, to ascertain the cause of death, I proceeded to do so. My attention being naturally directed to the heart and thorax, I examined them first. I found the external integuments well covered with fat. On reflecting the sternum, and bringing to view the viscera of the chest, I was much struck with the great size and distension of the pericardium, which had something like the feeling of a distended bladder. A slight incision into it soon revealed the true nature of the case: a jet of liquid blood being thrown up followed by a more general flow of the same, and finally a tolerably thick layer of coagulum, covering nearly the whole heart, made me feel sure that there had been a rupture of some portion of the heart. This, on removing that organ carefully, was discovered to exist in the left ventricle, near its apex, in the shape of a small opening, capable of admitting the insertion of a small blow-pipe, appearing like a mere separation of the muscular fibres, a slight patch of ecchymosis alone marking the spot where the rent existed. I feel unable to account for this state, as the walls of the ventricle appeared otherwise quite healthy, retaining their natural color, thickness and strength. There seemed no ramollissement or fatty degeneration, but a coating of fat on the surface of the heart on various parts. This otherwise appeared sound, and free from disease of the valves. I may remark, however, that the aorta, near its junction with the heart, gave a peculiar gritty feeling to the finger, as if there was a deposit of ossific matter going on there.

The chief point for observation, and that which seems to me to invest this case with peculiar interest, consists in the unusual length of time that the patient existed after so formidable an occurrence to so important an organ; for I think we may safely infer it was contemporaneously with the fall in the road that the lesion occurred. The few

cases on record of ruptured heart, whether arising from mechanical violence or dependent on diseased action, invariably announce that death was instantaneous; but we have here one which may justify us in concluding that such is not always the case.—*Lancet.*

A CASE OF REMOVAL OF THE PATELLA OF THE LEFT KNEE, WITH RECOVERY, AND EXCELLENT USE OF THE JOINT.

Read before the Medical Society of St. Joseph, Missouri. By O. B. KNODE, M. D.

On the 10th of March, 1859, I was requested by Col. A. to visit, in consultation with Dr Wheeler, of Palermo, his son residing in Doniphan County, Kansas Territory, about twelve miles distant from this city. On arrival I found Dr. Wheeler present, and upon inquiry learned that about Christmas preceding, young A., aged twenty-one years, of nervous, sanguine temperament, had fallen upon the hard frozen ground and slightly bruised his left knee, to which he paid but little attention, until he was reminded of it by its becoming painful, hot, and swollen, when he sought the advice of a Kansas quack doctor, who, he declares, by irritating applications of various plasters, powders, and the like, produced sloughing of the integuments, and finally denudation and death of the patella. Thinking it was beginning to be a very serious affair he called Dr. Wheeler to visit him, who seeing the nature of the injury, informed Col. A. of the fact, when he came at once to request me to consult in the case.

I found the young gentleman very much emaciated, pale, with hectic flush, pulse 130 beats per minute, and had been confined to his bed for two months and a half. On examining the knee, I found the necrosed patella black, denuded of its investments and dead, imbedded in a profuse mass of unhealthy granulations sprouting up around it, an inch or more high; the suppurative process having opened the synovial membrane to a large extent, the synovia was found to be distilling from the cavity of the joint in considerable quantity. The ligamentum patellæ was found intact on its under surface, but in a somewhat softened condition, and the tissues generally about the joint swollen and enlarged.

Upon consultation, it was thought, after taking all the circumstances of the case into consideration, that its early removal was pressingly indicated—his quick and compressible pulse, his emaciation, his hectic, and his fast-failing strength, all indicated that he could not much longer sustain the irritating consequences the dead patella was inflicting; consequently, two days after, the patient being put fully under the influence of a mixture of chloroform and ether, Dr. Wheeler removed the bone by seizing it with a pair of strong dissecting forceps and detaching with a scalpel the attachments left by the ulcerative process, which consisted in a part of both the ligamentum patellæ and portions of the yet attached synovial membrane. Of course, its removal exposed fully the inside of the joint; and the cartilaginous ends of both the femur and tibia looked perfectly healthy. The patella was necrosed down to its internal articular cartilage, which was healthy, except a couple of discolored spots, which showed conclusively that its complete destruction was being rapidly accomplished. The wound was closed as near as possible by adhesive straps, but the edges could not be entirely approximated; a piece of lint dipped in glycerin was applied over the wound, and the whole knee enveloped in a couple of turns of surgeons' gum-elastic cloth, extending five or six inches above and the same distance below the wound, and fastened by a small roller at each end, to exclude as perfectly as possible the air from the joint—a device which, I think, contributed much to the satisfactory result obtained The limb was then placed upon pillows, in a slightly flexed condition. In consequence of great suffering from pain in the joint, a full dose of morphia was given, to be repeated at such intervals as would be necessary to keep him entirely comfortable; a generous diet was ordered, with wine and other stimulants. I then left the patient

Dr. Wheeler attending to the after-treatment, and expected, as a matter of course that if he recovered at all it would be with an anchylosed joint; but judge of my surprise and astonishment at meeting him on the street, in this city, a few days since, five months after its removal, walking almost as well as if nothing had occurred. I then examined the joint, and found the depression made by the loss of the knee-cap, and in its stead a ligamentous band seemingly uniting the two ends of the ligamentum patellæ. He then showed me how well he could walk, run, jump, kick, and in fact execute every movement of the joint almost as well as with the sound one, and he further assured me that the strength of the joint, as well as the facility of its movements, were daily increasing.

This most remarkable and interesting case demonstrates to us the wonderful recuperative and repairing powers of nature, and so rarely have injuries to this bone required its removal, that I can only find two cases of a like nature recorded. One of them occurred in the practice of our distinguished countryman, Professor Gross, and was of a very similar character to the one I have just described, a history of which will be found in his late and excellent work on surgery; the other case I find recorded in Professor Eve's work on surgery, as having taken place in 1829, in the practice of M. Thirion, of Namur, in France.

ON SCALDS OF THE LARYNX.

By Philip Bevan, M.D., Fellow and Professor of the Royal College of Surgeons, Ireland, &c.

Dr. Bevan, in this valuable paper, reports four cases of scalds of the larynx, produced in young children by drinking boiling fluids from the spout of a kettle, and his object in doing so is to recommend for further trial a new plan of treatment in preference to the very unsatisfactory operation of tracheotomy. In regard to this procedure he shows that its fatality does not arise from delay, as in the majority of reported cases it was performed in less than seven hours after the occurrence of the accident, and most of the cases died, although they seemed to be improved by the operation for a short time. The author divides the *symptoms* produced by scalds of the larynx into three stages; and without entering into these in full, we will merely state that in the first stage the mouth and fauces are alone affected, and the respiration unembarrassed. These symptoms may be so mild as to mislead the practitioner, and from want of attention the patient may be lost. The second stage is characterized by laryngitis, giving rise to œdema of the glottis and incipient congestion of the lungs. In the third stage congestion of the brain and engorgement of the lungs are added to the previous symptoms.

The *treatment*, which is antiphlogistic, is commenced with an emetic, followed by a cathartic enema, and the application of a few leeches to the upper portion of the sternum, the number being regulated by the strength of the child. Should signs of the second stage appear, the system is brought as rapidly as possible under the influence of mercury, by the internal administration of calomel and inunctions with the blue ointment; the severity of the symptoms, the age and strength of the patient influencing the amount of the mineral employed. Leeches, which act by diminishing congestion of the brain, are to be repeated every three or four hours, care being taken to watch their effects. In these four cases, as soon as the mercury had made an impression on the system, and the green stools were produced, the symptoms abated and the child recovered; the lungs being first relieved, next the brain, and lastly the larynx. Although this treatment has been instituted in only four cases, yet as its results were uniformly successful, this line of practice should awaken the attention and consideration which the disease calling for it most unquestionably demands. All of these patients

were affected with œdema of the glottis, erect and hard epiglottis, stridulous respiration, fixed pupils, pale, bloated features, cold surface, congested lungs, and incipient coma, symptoms which are considered sufficiently bad to justify a resort to tracheotomy. The operation may be tried in extreme cases, when dissolution seems to be immediate; but Dr. Bevan believes if the antiphlogistic treatment be conducted sufficiently rapidly so as to stop or retard the progress of the second stage, and ward off injury to the brain and lungs, it will be far more successful than tracheotomy.

MEDICINE.

A CRITICAL EXAMINATION OF THE DISEASE KNOWN AS BRONZED SKIN, OR DISEASE OF THE SUPRA-RENAL CAPSULES.

By Edward B. Dalton, M.D., Resident Physician of St. Luke's Hospital, New York.

Five years since (May, 1855) Dr. Thomas Addison, Senior Physician to Guy's Hospital, London, called the attention of the medical profession to a peculiar and fatal disease, the symptoms and characteristics of which had, up to that time, been either overlooked or misunderstood.

In a memoir of some forty pages, entitled, "The Constitutional and Local Effects of Disease of the Supra-Renal Capsules," he describes and discusses the causes and relations of certain morbid symptoms, the concomitance of which he now believes to indicate the presence of a disease hitherto unrecognised, and dependent for its origin upon some pathological condition of the supra-renal capsules. In support of his opinions, he adduces the history of eleven cases, which had fallen under his observation within the five years immediately preceding the publication of his work.

The subject at once excited great interest. Other observers in different countries, and independently of each other, soon began to report cases of similar character to those described by Dr. A., which, with the investigations and results accompanying them, have, from time to time, been made public. Autopsies, vivisections, chemistry, and the microscope have all been brought to bear upon the further elucidation of the subject; so that, at the present date, a great deal of matter has been laid before the profession in regard to it.

This matter, however, is very much scattered, and accompanying what is definite and reliable is much that is irrelevant and inconclusive. It is my purpose, in the following thesis, to separate the one from the other, to select and bring together the most important facts and well-attested conclusions which the investigation of this subject has elicited, and to show, so far as I may be able, the point of the accurate knowledge in regard to it which the professional has now reached.

As I have already mentioned, this affection is called by Dr. Addison "Disease of the Supra-Renal Capsules," from the supposed dependence of its symptoms upon a pathological condition of these organs.

By the French it is termed "Bronzed Skin" (Peau Bronzée), from a peculiar discoloration of the integument which is its most prominent external mark. So far as I am aware, it is a disease confined to no especial locality, to no particular season of the year. It occurs sometimes by itself, sometimes complicating other disorders. It is met with in persons of either sex, and of any age; though it is generally observed in those who have passed the period of youth. In its access, it is insidious in the extreme, usually escaping detection until the gradual but steady loss of health has rendered the patient unfit for his usual occupations. In its duration it is variable, sometimes progressing with such rapidity as to destroy life in a few weeks, while in other cases the patient bears the indelible mark of his relentless malady for years.

Its termination, almost invariably, is death.

The symptoms are as follows: General debility, coming on without any assignable cause, and from the slightest possible manifestation, increasing with a progress so slow and gradual, that, when at last it has become so marked as no longer to escape notice, the patient is unable to assign any date for its commencement. Accompanying this loss of physical power, a more or less marked decrease of intellectual energy is noticed; and the patient experiences a growing disinclination of either bodily or mental exertion. The gait becomes slow and feeble; the countenance dull and inexpressive; and the whole appearance and air languid. The digestive powers participate in the general lack of vigor; the appetite fails; the bowels are constipated; there is nausea with occasional vomiting. This enfeebled condition of the system is liable to the most sudden and alarming increase under the slightest disturbing influence—the mere operation of the simplest cathartic often producing such an utter prostration of the vital powers, that death seems imminent from sheer exhaustion.

At times, indeed, attacks of faintness occur with no assignable cause whatever; and all this when the apparent progress of the disease, and the usual condition of the patient, are very far from accounting for such occurrences. The circulatory system is enfeebled. The action of the heart is weak and irritable, and the pulse corresponds with such a condition, being in some cases small and feeble, in others—and this is the more common—full, but soft and compressible.

The respiration, too, is affected, shortness of breath being often complained of, especially on any attempt to active exercise; and the patient is subject to attacks of giddiness and dimness of vision. Besides the comparative inactivity of the intellect, slight mental aberrations are occasionally noticed. Accompanyimg these symptoms there is a certain degree of emaciation. This symptom, however, is not at all in proportion to the loss of strength. It is rarely extreme, generally but moderate, and, in some cases, almost entirely absent. The tissues, however, although remaining of nearly their usual bulk, lose much of their natural solidity, and become soft and flabby, so that often the patient has sustained a loss in weight far greater than the mere change in appearance would indicate.

As a general rule, the patient does not complain of much pain, though this symptom is not entirely wanting. A sense of uneasiness, at times amounting to actual pain, is felt about the lumbar region, and painful sensations are now and then complained of in the epigastrium.

But the most prominent and characteristic symptom of this strange disease, and one which by many observers is considered pathognomonic, is the peculiar cutaneous discoloration already alluded to. It consists in a curious staining or mottling of the skin, differing somewhat in shade in different cases, and in different stages of the same case, but having a general similarity of hue in all. Dr. Addison describes this color as presenting "a dingy or smoky appearance, or various tints or shades of deep amber or chesnut-brown, and in one instance, the skin was so universally and so deeply darkened that, but for the features, the patient might have been mistaken for a mulatto." It has often been compared to the color of a bronze statue from which the polish has been rubbed off, whence the French name "Peau Bronzée." Dr. Isaac E. Taylor, however, who has taken great interest in this subject, and whose opportunities for experience are ample, has, in his well-known monograph, laid especial stress upon the comparison of the complexion of patients affected with the disease to that of mulattoes of a greater or less degree of color. In the only two cases which I have had the fortune to see, the latter illustration seemed to me the more appropiate.

So manifold, however, are the variations in shade, that these slight differences in the descriptions of different observers need give rise to no doubt as regards the identity in character of the color. The distribution of this pigment, for it has been proved to be a deposition of such matter, is peculiar. While the entire integument is tinged with a slight dinginess, it seems always to elect some or other of certain situations for its

especial accummulation, and as invariably to avoid certain others. The forehead, cheeks, neck, mucous membrane of the lips, chest, axillæ, elbows, backs of the hands, penis and scrotum, and, less frequently, the thighs and knees, some or all, are the more ordinary sites of the greatest intensity of color, while the palms of the hands are but slightly colored, and the matrices of the nails and the conjunctivæ never affected. It seems to exhibit a special predilection for those parts of the body which are most exposed to the influence of the atmosphere ; so that, by a casual observer, the discoloration might easily be mistaken for the ordinary browning of the sun. Indeed Dr. Taylor has found this resemblance oftentimes so close that, besides the comparison of the mulatto, he denominates the diseased hue " the sunburnt appearance of the skin."

The deposit often takes place in distant patches, having a well-defined line of demarcation. On the forehead, for example, commencing just above the eyebrows, it will extend upwards to within a few lines of the roots of the hair, laterally over each temple, down upon the cheeks, thence to the sides of the neck, where having covered more or less of the entire surface, it comes to an abrupt termination, to show itself again in similar patches upon the chest, flexures of the arms, and other parts. It is usually particularly dark upon the face and backs of the hands, in which latter situation the unaffected matrices of the nails present a strong contrast to the general duskiness, and afford a striking distinction between this and the discoloration of other cachexies. The mucous membrane of the lips, especially just at its junction with the integument, is generally spotted with peculiar intensity, presenting an appearance as if stained with ink, and in some instances the membrane quite within the cavity of the mouth is thus affected.

Under the head of case VI. in Dr. Addison's book, two cases are described in which the appearance of the skin presented a most curious deviation from that ordinarily observed. Besides the dark patches amid the general dusky hue usually found, there were other patches having a remarkable blanched appearance, which Dr. A. believes to have been owing, not solely to contrast with the surrounding color, but to an actual deficiency of pigment; a deficiency which was found, on close inspection, to be shared by the hair situated upon the parts thus affected. In the latter of the two cases there existed such a spot upon the pubis, the hair covering which was nearly equally divided, one half retaining its natural dark color, the other being perfectly white.

In the number of the *Gazette Hebdomadaire* (Paris) for the 26th December, 1856, there is an account of a case reported by M. Giacomo Mignoni, in which this remarkable loss of color affected the hair generally. This discoloration probably commences simultaneously with the other symptoms, increasing in extent and intensity as the disease progresses, though generally with so slow and gradual a change as not to attract the attention of the patient or his friends until decided symptons of ill-health have become evident. As the skin becomes darker, the conjunctivæ not only are free from any deposit of pigment, but even lose considerable of their natural opacity, and become pearly and anæmic. In some cases the dingy hue imparted to the skin during the early stages of deposition of pigment gives to the patient an unwashed appearance; so much so that not unfrequently the physician is especially consulted in regard to the annoyance arising from this symptom. It is, however, very difficult to convey a clear idea of this color in its variety of shades, by a mere verbal description ; but when once seen and its peculiarities carefully noted, its general simplicity in all cases is such as to prevent confusion.

I have already alluded to the immediate origin of this color. Minute examinations by several French microscopists have resulted in the opinion that it arises from an abnormal deposit of pigment cells in the layer of the integument, which is the seat of the natural healthy coloring matter, the rete mucosum, and in the number of the *Gazette Hebdomadaire* for the 12th of December, 1856, the opinion of M. Vulpian is given; and in the *British and Foreign Medico-Chirurgical Review* for April, 1858, Dr. Harley gives his own, and that of Dr. Hutchinson, and Mr. West's, all of whom agree that the pigment is identical in character with that in the skin of the negro; that is, the same as in the skin of man in general, the only abnormity being in the unusual quantity.

As the disease progresses, and especially as it draws near its fatal termination, all these symptoms become more pronounced. The debility increases until the patient can no longer walk, or even sit up; the intellectual faculties become more and more sluggish; the appetite is gone; the digestive organs refuse their office; the bowels operate only at long intervals, and then unnaturally; the stomach, irritable to an extreme degree, rejects everything that is put into it; the tissues, wasting now much more rapidly than at first, retain hardly a trace of their natural firmness; the weakness and irritability of the heart's action increases; the pulse is feebler and more irregular; fainting fits become more frequent and spontaneous, and the general demeanor is puerile. The breath is fœtid, and the odor of the body cadaveric; and still, withal, the ever-deepening hue of the surface proclaims the steady progress of the disease.

Thus, after an illness of perhaps a month or two, perhaps of several years, the patient sinks at last and dies, sometimes with the intervention of coma or convulsions, sometimes with but the appearance of simple physical exhaustion; but often with a final suddenness which takes by surprise even those who have long been watching him.

Such are the positive symptoms of the disorder known as "Bronzed Skin," or, "Disease of the Supra-Renal Capsules." They differ somewhat in relative importance in different cases, and in many are, to a certain extent, altered or masked by the concomitance of the symptoms of other troubles under which the patient is at the same time suffering. In spite, however, of all sources of confusion they are generally sufficiently distinct upon a close and rational examination; and become far more decisive in their indications, when taken in connection with the sources of negative evidence, which I shall now consider, as relating to the diagnosis of the disease.

And first, of the anæmia and general debility. Notwithstanding the numerous causes of a chronic morbid state of this kind, and the many forms under which it presents itself, still a case seldom occurs in which we are not able, by close investigation, to detect some efficient cause for its production. In the disease we are speaking of, there is no such to be found. No hemorrhage has taken place; no diarrhœa has occurred; no extensive suppuration or other debilitating process is discoverable; the most full and minute physical examination of both chest and abdomen fails to detect the slightest disease in any of the internal organs; the urine, whether under the microscope or in the test-tube, affords no clue, in quantity and quality it is perfectly normal; an examination of the fæcal discharge is equally unsatisfactory; there has been no exposure to malaria of any kind; no habits likely to produce such a state have been indulged in. In a word, the circumstances surrounding the patient have been in every way as favorable to health as usual, and yet some morbid influence has insidiously crept upon him, which, with a gradual but unflagging progress, is sapping the vital powers in spite of all that is done to prevent it. As in other diseases, so in this, one or other of the causes alluded to may co-exist, giving rise, so far as this individual symptom is concerned, to confusion, and rendering it far from pathognomonic. But by having a clear idea of its character when uncomplicated, we shall the more easily detect it under other circumstances.

For distinguishing the peculiar discoloration, the evidence afforded by its positive characteristics is strengthened very much by that of its negative qualities. It may at once be known from that arising from any trouble in the liver, by the facts that the conjunctivæ are unaffected, and that the coloring matter of the bile is not present in the urine. From that produced by the existence of other cachexies, or by the agency of natural causes, it owes its distinction mainly to its situation and to the marked peculiarities in its distribution, lying entirely beneath the epidermis, and leaving, as it does, certain parts unaffected which have no exemption from pigment deposited from other causes, and displaying peculiar intensity in parts not particularly subject to other cutaneous discolorations. Among the latter the mucous membrane of the lips and mouth is one of the most striking, while, as belonging to the former class, I have already alluded to the conjunctivæ and matrices of the nails, and, in a less degree, the palms of

the hands. The absence, too, of any known cause, whether natural or morbid, is strongly corroborative.

Of the treatment of this disease I have very little to say, and that little has reference rather to negative than to positive measures. I find, in the report of some cases, that a constitutional tonic plan of treatment, especially the use of quinine, has seemed of temporary service.

Dr. Todd has recently recommended the use of sugar, on the ground that the disease interrupts the production of sugar in the liver.

Further than this I know of no positive plan which possesses even this limited value. Negatively, I should infer both from the records of others and my own limited observation, that the use of drugs of a reducing or depressing nature is especially dangerous, and that even ordinary cathartics should be used with great caution. Every disturbing or debilitating influence should be most scrupulously avoided.

As so many cases of this disease have been reported within the last few years, I shall only give a brief history of two which have fallen under my own observation, merely alluding to such points in others as are valuable for illustrations, or as evidence.

Case 1.—The first case which I saw was that of a boy seventeen years of age. When I first saw him, which was in August, 1857, his symptoms were as follow: great debility, lack of appetite, nausea, irregularity of the bowels, tenesmus and frequent inclination to go to stool, neuralgic pains in the head, abdomen, loins and lower extremities, occasional slight attacks of delirium, disturbance of vision, vertigo and ringing in the ears. He had suffered twice from epileptic attacks; the heart's action was feeble and irregular, the pulse moderate in rapidity, but weak. The skin was markedly and peculiarly discolored. On a casual observation it appeared like that of a light mulatto, but a more careful examination showed a singular patchy arrangement. The face, including a small portion of the sclerotic of the right eye, was of a uniform dark shade, with the exception of a stripe of half an inch in width, extending across the forehead just below the roots of the hair, where the complexion was normal. The ears and upper part of the neck were of the same unnatural color as the face, as were also the elbows posteriorly, the backs of the forearms, wrists and hands, and the knees anteriorly. The penis and scrotum were particularly dark. Some slight patches were to be seen on other parts, and scattered here and there were small spots, in size like freckles, but in color almost black. At the junction of the labial mucous membrane with the integument were several small deep stains. The conjunctivæ and matrices of the nails were free from color.

I will give the principal points in the previous and subsequent history of this patient, which, together with notes of the autopsy, were very kindly given me by the attending physician, Dr. Charles A. Savery, of Lowell, Massachusetts.

In the Month of April, 1857, it was noticed that the boy's complexion was darker than usual. This change was ascribed to exposure to the sun. In the following June his health began to fail, and during the four or five succeeding weeks the symptoms which I have described gradually became noticeable. As an evidence of the patient's extreme debility I would mention that the administration of two drachms of castor oil, which was followed by an immediate operation, produced such extreme prostration as to necessitate a liberal use of brandy; which latter prescription afforded the patient more relief than anything else throughout his illness. At the time I saw the patient the emaciation was but moderate, though his weight was very much below what it had been in health. During the months of September and October the symptoms gradually increased in severity, though at times the patient would rally, and, with renewed appetite and digestion, seem for a few days to have mastered his disease; but it was only to give way more hopelessly than before. His pulse varied in character, being sometimes so feeble as hardly to be perceptible at the wrist, and at others full, soft, and compressible Its rapidity was very much accelerated by exertion, the number of the beats being increased thirty per minute by the mere act of rising from a recumbent to a sitting posture. The patient's eyes often remained open during sleep. During the last fortnight of his illness

the debility was such to as confine him to his bed. He became drowsy and disinclined to talk, though perfectly rational. On the 20th of November, 1857, he suddenly expired without the intervention of any new symptom. Thoughout the entire course of the disease repeated and careful examinations could detect no efficient cause for the symptoms. The diagnosis of "bronzed skin" was made a few weeks after the patient first consulted his physician.

It will be noticed that in this case the duration of the disease was eight months from the first appearance of the discoloration, and six from the commencement of the other morbid symptoms.

The prominent appearances at the autopsy were as follows: body much emaciated; discoloration as distinct as during life; marked incurvation of the abdomen. "Both supra-renal capsules were found to be enlarged, hardened, and to contain a considerable quantity of calcareous matter. The left was much larger than the right, and both seemed to be diseased throughout their entire structure." No other marks of disease worthy of notice were found.

Case 2.—The second case was that of a man some fifty years of age. At the time I saw him, which was in September, 1857, he had been out of health for three years. He had been losing strength and flesh, though he was by no means strikingly emaciated. His weight was some fifty pounds below his healthy standard. The skin was strikingly discolored, so much so, indeed, as to excite a suspicion of "bronzed skin" in the mind of his attending physician, upon his first visit, previous to any inquiry or examination. It was of the same mulatto-like hue already described, but did not exhibit so strikingly the patchy arrangement, being uniform over the face, neck, and ears.

The history, as obtained from the patient, is as follows:—In the summer of 1854 he began, rather suddenly, to lose his appetite. This was followed by gradual loss of strength and flesh, which was accompanied by debility and ill-defined pains in the abdomen, and over the region of the kidneys. His skin began to look dingy in the autumn of the same year, and the intensity of the hue had been gradually increasing since. He had been under medical treatment several times during his illness, but without material benefit. His symptoms had always been ascribed to hepatic trouble. He had been steadily, but very slowly, losing ground since the first.

Subsequently to the time when I saw him, I learned from the attending physician that his condition steadily deteriorated, with all the symptoms ascribed to capsular disease well marked, and among them he particularly noticed a disagreeable odor of the breath, and a halitus from the body. The bowels became very torpid, operating only at intervals of ten or fourteen days, and the abdomen was so very much incurvated that the anterior walls seemed in contact with the vertebral column. The debility and gastric irritability became extreme. He died in February, 1858, with no new symptom, but dropped away so suddenly at last as to surprise very much his physicians and friends. No post-mortem examination was obtained.

Here we see the disease continuing three years and a half, instead of a few months, as in the last case.

To be continued.

A CASE ILLUSTRATING THE PATHOLOGY OF THE CEREBELLUM.

By G. Rolleston, M. D., F.R.C.P., &c.

Two symptoms of cerebellar disease have been observed in several recently recorded cases, which, when combined, are considered by Dr. Rolleston as pathognomic. The first is an inability to maintain the erect posture when raised into it, coupled with complete power over either or both of the legs when in the horizontal posture; the second, stiffness of the neck. An illustrative case is furnished by him, and he attempts to show that "what we know alike of the pathology and of the physiology of the cerebel-

lum is clearly explicable on the hypothesis that that great nerve-centre stands in the same relation to the motor nerve nuclei of the trunk and (posterior?) limb muscles, as the corpora olivaria do to the motor nerve nuclei of the face, tongue, and throat muscles." The corpora olivaria, it may be remarked, have been considered by some observers as agents modifying the impressions which they have received from the medulla oblongata, so as to call forth, when reflected on to motor nuclei, and down motor fibres, the required bilateral muscular action. The patient, a child ten years of age, was seized early in 1859, with a "bad cold in the head," and with chills. A week or two afterwards she could not maintain the erect position, although she had the power of moving her legs when lying in bed. She suffered from rheumatic fever, and in about three months or more after the first attack had two convulsive fits, after which she began to recover the use of her lower limbs, and to sit up. She could always use her hands and arms.

As described by Dr. Rolleston, nearly nine months after the appearance of her first symptoms, she can turn her head from side to side on the pillow, not, however, without considerable difficulty in accomplishing it, while she catches at her head and supports it in her hands, if she be raised up in bed. If the head be left unsupported, it falls to one side or the other. She can walk along by the side of a wall or table, provided she can get some support for her head, and the hand and arm she rests it upon. She has stiffness of the neck, but not of both sides of the neck at the same time. When the head falls over, it does so with much greater force than its mere weight would account for. Dr. Rolleston considers that "for the support of the head, consentaneous and bilateral muscular action is required; but when the functions of the cerebellum are in abeyance, this result is not obtainable even in obedience to the orders of the will. But no bilateral action is necessary for the turning of the head from side to side, if the back of the head lies supported on the pillow. This movement she can execute, therefore, just as formerly she could move either leg while lying horizontally, though unable to maintain the erect posture." It is conjectured that the meninges of the cerebellum were first affected, although the unavoidably imperfect history of the case interferes with the expression of a certainty in the pathology.—(*London Medical Times and Gazette*, Feb. 18, 1860.)

TREATMENT OF EXCESSIVE PERSPIRATION OF THE FEET.

By M. Gaffard.

It is well known that excessive perspiration of the feet may be a very troublesome complaint. It not unfrequently produces excoriations between the toes, giving rise to an exudation of a disgustingly fetid odour; and it sometimes occasions ulcerations, which render locomotion very painful, or altogether impossible, forcing the persons affected to interrupt their business occupations. M. Gaffard, of Aurillac, recommends the following means, which he says he has employed in such cases with complete effect. The treatment consists in pouring between the toes a few drops of a liquid, composed of one gramme (fifteen grains) of red oxide of lead, and twenty-nine grammes (about an ounce) of the solution of subacetate of lead, (of the French Pharmacopœia;) the sesquioxide of lead is pounded in a mortar of porcelain till it is finely divided; the subacetate is added gradually; and the whole is put in a bottle, which is shaken each time it is used. This application made every eight days is sufficient, in most cases, according to M. Gaffard, to cure the affection, and prevent its return. The liquid, without completely stopping the perspiration, moderates its amount, and regularizes the action of the morbid surfaces. The perspiration becomes inodorous, the skin regains its original thickness at the excoriated parts without losing its pliancy, and the parts return to the natural condition of cleanliness and health.—(*Rép de Pharmacie, and Edinburgh Medical Journal*, January, 1860.)

THE

British American Journal.

MONTREAL, JUNE, 1860.

PROFESSIONAL ETHICS AND CHLORODYNE.

Up to a late period the profession in England was remarkable for the frank and generous manner in which every discovery which could have proved beneficial, even in the smallest degree to the public, was openly promulgated, in which a medicine capable of relieving, even in part the sufferings of our common nature was not only cheerfully announced, but its nature, its composition, and every thing about it which could have been deemed useful to know, was at the same time voluntarily disclosed. So high strung was the tone of professional morality on this point, that an opposite course of conduct was considered a treason against duty, and the guilty party received at once his doom from public opinion, that of ostracism. Indeed, if we mistake not, Percival, in his work on the ethics of the profession, severely denounces the practice as one incompatible with that philanthropy, which it is the boast of the profession to have emblazoned on its standard. In those happy days when he lived, there was no rarer spectacle than to find men, members of the profession, occupying it may be distingushed p[illegible]ions in it, calmly proposing remedies, of the nature and composition of which they were themselves only cognizant, or if perchance their efficacy under certain circumstances was undoubted, either preparing them themselves, or getting an apothecary to prepare them, afterwards selling them at an enormous profit to their own advantage. We say there was no rarer spectacle than this! No! such proceedings were reserved for the Solomons, the St. John Longs, *et id genus omne*, the host of *nostrum* manufacturers and vendors, who lived and fattened on the credulity of their neighbours, or as Falstaff aptly expressed it, "turned diseases into a commodity." So sternly did the profession reprobate such proceedings, that they were scarcely countenanced even in the apothecaries, and the paper-war between Dr. Paris and Mr. Battley, a respectable manufacturing apothecary of London, can scarcely be forgotten, when the latter was introducing his Liquor Opii Sedativus, a really valuable preparation, which has stood the test of time, but the nature of whose composition is about as much known now, beyond mere conjecture, as it was on the day on which it first saw the light.

These reflections have been painfully forced upon our mind in witnessing the transparent quackery,—we can use no milder word,—with which Chlorodyne, the product of the pharmaceutic genius of Dr. J. Collis Browne, M.R.C.S.L., Ex Army Medical Staff, is being invested. It had been gradually creeping its way

into general favour and use during the last eighteen months, and from what we have seen of its effects, we must say that it is a very valuable anodyne, and in many respects, for internal administration, superior to any of the ingredients, which according to the "Chemist and Druggist," are said to enter into its composition. We have no doubt that Dr. Browne placed the formula for its preparation in the hands of Mr. J. T Davenport, "the sole agent and manufacturer" from the first, (indeed the advertisement states as much) who has been retailing it at the enormous sterling price of 3s. per ounce, making its price in this country 7s. 6d., H. Cy., a price so high as necessarily to limit most materially its employment. After, however, about twelve months comfortable enjoyment of the proceeds between himself and his sole agent, the composition of the remedy was given to the world, as the result of an analysis by Dr. Ogden, when forthwith, another pharmaceutist, a Mr. Freeman, advertises chlorodyne for sale at 1s. 6d. per ounce, "guaranteeing it to be uniformly and properly prepared, and superior to that of any other maker though his charge be ever so exorbitant; and he trusts that the lowness of price, at which he offers it, will allow the profession to use it in common practice and at public institutions." We may now remark, that if the composition of chlorodyne be as it was published, the price of it as demanded by Mr. Freeman, is about what the true cost of it should be, even then allowing a very wide margin for profit. At this raid upon his beloved profits, Mr. Davenport very naturally fires up, and vents his indignation in the following words taken from a subsequent announcement.

"*Address to the Medical Profession*, &c.—Physicians when prescribing *Chlorodyne* believe that their patient will have it, and anticipate on their next visit a marked benefit from its employment. But too often disappointment results, and why?—Because the word *Chlorodyne* is dishonestly, fraudulently, and piratically applied to compounds made in imitation of or substituted for the only genuine, viz:—*Dr. J. Collis Browne's Chlorodyne*. Dr. J. C. Browne discovered and named this extraordinary remedy, and confided its manufacture solely to *J. T. Davenport*, 33 *Great Russell Street, Bloomsbury Square*; therefore the assumption of the name or title of this word to any mixture or compound but the genuine is a gross and palpable deceit and representation of what is not true. Physicians and Practitioners are impressed with the necessity of remembering this fact, and when prescribing, using the words, "Dr. J. Collis Browne's Chlorodyne." Price to the Profession 3s. per fluid oz., in quantities of 10 oz., carriage free. Each bottle to be genuine should have a red label, with the words Dr. J. Collis Browne, in white letters outside, and the signature of J. T. Davenport on the label within."

Let us now compare these proceedings with others that are continually taking place around us. And we allude now in an especial manner to the quack advertisements with which nearly all our local journals abound, and which we take at random from our city newspapers.

One of these advertisements is that of Dr. Wistar's Balsam of Wild Cherry. Here is the conclusion of it:

"The genuine article always has the written signature of "*I. Butts*," on the wrapper, and is for sale by all respectable Druggists everywhere."

Another is that of Holloway's Ointment and Pills, which winds up as follows:

"*Spurious Preparations.*—Counterfeits of these celebrated remedies may be instantly

detected. Unless the words "Holloway, New York and London," are distinguishable as a water-mark on each leaf of the book of directions accompanying the preparations, the articles are fraudulent."

Another taken almost at random, is that of N. H. Down's Vegetable Balsamic Elixir. Here are its concluding words:

"The price of this article is 50 cents and $1 per bottle, and for Trial Bottles 25 cts. The trial bottle we have not put up till within a few months. We do it now that all may give it a trial at the least possible expense. There is a little counterfeit Elixir in the market, made by Jasper Curtis, of St. Albans, Vt., but it is not signed with pen, N. H. Downs, but is signed with red ink, J. Curtis. This is a base counterfeit, and can easily be detected as above, and from the fact that it sells and is marked 37½ and 75 cts. per bottle. Of course said Curtis dare not sign it with pen N. H. Downs, as that would be forgery. *Beware of Jasper Curtis's counterfeit!* Remember the genuine is warranted, and is signed, with pen, with my name, *N. H. Downs.*"

And the last which we will notice is the advertisement of Prof. Charles De Grath's "Electric Oil," which after sundry encomia on its surprising powers, terminates modestly in the following words:

"☞ None Genuine without the name of Prof. *Charles De Grath.* Principal Office—217 South Eighth Street, Philadelphia. No Pedlars sell this article. Beware!"

We regret to be compelled to ask our readers to compare these last four extracts with the advertisement of Mr. Davenport, and if one reflection will force itself more painfully on their minds than another, we are convinced it will be, that as the first lapse from virtue in a woman is but the commencement usually of a headlong descent to the deepest degradation, so has the lapse from strict ethical propriety in the case of the authors of the chlorodyne, led them to proceedings whose like is only to be met with among parties who are beyond the pale of the Profession.

What has the whole British Medical Press been about for months past, that not one word of remonstrance has been raised against such practices? We remember well the time when the *Lancet* would have been the first to denounce them. Let that press find no fault with us if we recall it to what we cannot but consider its duty; and let it remember that though in Canada, we still may maintain an interest in the proceedings of the profession in England, and that it is only "*cœlum non animum mutant qui trans mare currunt.*"

THE BILLS RELATING TO PROFESSIONAL MATTERS BEFORE THE LEGISLATIVE ASSEMBLY.

Not one of the Bills on which, in preceding numbers of this Journal, we bestowed some attention has become Law. The Parliament has terminated its session, and thus ends all legislation for twelve months to come. With regard to some of the bills we do not regret this finale to their appearance, but if there is one for whose end in this manner we do entertain feelings of regret, it is the Registration Bill for Upper Canada. Liberal in the extreme as we thought it, and we have carefully studied it; interfering with no vested rights, but desirous only of placing a wide line of distinction between the regularly educated physician and surgeon, and the ignorant pretender; demanding nothing more for

the members of the profession, than the mere act of enregistering with an appointed officer their qualifications to practice. the same formality exactly as the qualified members of the profession in England have now to observe in compliance with their Bill of the same tenor; we do confess to great surprise that a very large amount of the opposition, which that measure encountered, should have emanated from members of the profession itself, an opposition founded in some instances which have come to our knowledge upon the most frivolous pretexts, and based in other instances upon the pique or jealousy of that section which resides in Toronto. Who, let us ask, should take the initiative in any such matter? Where or in what town should any measures having the general good in view originate, except in the largest and most populous town in the Province? We believe that the Toronto profession would have offered no opposition had such a measure originated elsewhere than among themselves; and yet such seems to be the general distrust, that any measure however good must be opposed, if that profession originates or has anything to do with it; and as in all such measures there must be a centralization of power in some city, an opposition was again founded on the fact that that centralization was to have been effected in Toronto. We are not writing in favour of the Toronto profession, more than in favour of that in any other city of the Province. We are merely striving for a principle. We have it on good authority, and we regret to state it, that if that Bill has proved abortive, it is solely due to the opposition offered to it by the profession scattered very generally throughout the Province. And so long as unanimity does not exist, so long as members of the profession advance their own individual interests in opposition, no general measure, or rather no measure having the general interests at heart, can ever become a law. As in England, individuals and corporations must each sacrifice a little for the general good. The securing of a Bill clearly remains with the profession itself, and so long as dissenting opinions and interests prevail, so long will the profession be divested of a measure which would secure it unity. The Homœopaths, to the shame of the Legislative Assembly be it said, had only to ask an Act of Incorporation and they obtained one, and certainly it is not much to the credit of the members of the profession in the Upper Province, that they cannot agree among themselves as to the details of any measure calculated to advance their own interests.

CONVOCATION OF THE UNIVERSITY OF VICTORIA COLLEGE.

The Annual Convocation of this University was held in Cobourg on the 25th of May last, when besides graduations in other Faculties, the following gentlemen received the degree of M. D. in that of medicine. We annex their places of usual residence, but are unable to give the titles of the "Theses" presented as an exercise for the degree.

John Harvey, Guelph; John Philps, Berlin; Elthem Wood, Fingal; W. H. Miller, St. Thomas; James Sutton, Fingal; Donald Gillespie, Mannilla; D. Carroll, Ingersoll; R. A. Corbett, Port Hope; John Clements, Trafalgar; N. B. Dean, Port Hope; James Newcombe, Toronto; E. W. McGuire, Rich-

view; M. B. McCausland, Aylmer; Geo. A. Norris, Brampton; E. A. Herriman, Lifford; B. Richards, Vaughan; R. Lund, Vaughan; C. Ouelette, St. Ann; W. Howell, Palermo.

After the degrees hed been duly conferred an address was delivered by the Hon'ble John Rolph, M.D., Professor of the Principles and Practice of Medicine, and Dean of the Faculty, who brought to the discharge of the duty, all the eloquence for which he is so distinguished. We are informed that the convocation was a highly satisfactory one.

CONVOCATION OF THE UNIVERSITY OF TORONTO.

At the Convocation of this University held on Tuesday June 8th the following proceedings took place in the Faculty of Medicine. We omit all allusion to the other Faculties.

Admission to Degrees.

M. B.—J. Bascom; E. Playter; F. B. Tisdell; E. D.Morton; W. W. Ogden; DeW. H. Martin.

M. D.—J. Cronyn, M. B.; T. G. Phillips, M. B.

Matriculants Faculty of Medicine.

G. Kilpatrick; E. D. Morton; H. Manly; R. Potts; C. W. Stinson; J. Bell; W. H. Covernton; J. C. Tisdell; J. C. Thom.

Medals and Prizes.—Faculty of Medicine.

J. Bascom, Gold Medal; E. Playter, Silver Medal; F. B. Tisdell, Silver Medal; E. D. Morton, Silver Medal; W. W. Ogden, Silver Medal; DeW. H. Martin, Siver Medal.

Scholarships—Faculty of Medicine.

Matriculation, G. Kilpatric; First year, C. Thom; D. B. McCool; J. C. Tisdell; Second year, J. Bolster; Third year, J. Elliott; A. Hudson.

A very large number of gentlemen were admitted to degrees, prizes and scholarships in the other Faculties.

The spacious hall was crowded on the occasion, and the annual dinner of the members of the University took place at the Rossin House the same evening.

THE CATTLE DISEASE IN THE NORTHERN STATES.

For some time past an alarming and fatal epidemic has prevailed in some of the northern American States, especially the States of Massachusetts, New York, New Hampshire, New Jersey, Vermont, and Maine, and unless immediate and active measures be adopted, there is little doubt that it will make its appearance among the horned cattle of this Province by importation. It appears to have been first noticed at Brookfield in Massachusetts, last autumn, from whence it has radiated in all directions, cases having been reported in the other States since that period. The disease is one affecting the lungs and pleura, and from the symptoms and progress which we have seen detailed, it is a pleuro-pneumonia of a typhoid type. With the most perfect accuracy,

that name has been given to it, and it is a disease which has been long well known in Europe, from which it appears to have been exported. It has prevailed extensively in Holland, in England, Scotland, and Ireland, in France, Spain, and the Cape of Good Hope, and in all these countries has entailed the most serious losses on the agriculturists. The disease may be recognized as in the human subject by the stethoscope, this instrument affording all the ordinary signs of inflammation of the lungs and their investing membrane; and independently of the epidemic character which it undoubtedly possesses, it is at the same time highly contagious or infectious, a single infected animal, introduced among a healthy herd, shortly infecting a very large number. In the State of Massachusetts a great deal of alarm exists in regard to its prevalence, and the rapidity of its extension. It has been the subject of legislative consideration. Means have been devised to check its progress, and a large sum of money has been already appropriated to recompense owners for the loss of animals ordered to be killed by a commission appointed for the purpose. The amount thus appropriated has been found inadequate, and a private subscription has fully doubled it. But all legislative influence is useless, unless the farmers themselves co-operate. We regret to say that from selfish motives, or the love of filthy lucre, the farmers have been endeavouring to get rid of their infected stock, by selling it to their unsuspecting neighbours, and in many instances the disease has been propagated in this manner, and has become of course more widely diffused. To check this as far as possible the legislature has ordered under penalties, all animals suspected to be diseased to be branded with the letter P. This may arrest the exportation, and tend to confine the disease to narrower limits, but it is doubtful if it will stop the traffic. Looking to ourselves, we certainly agree with a local political journal, the *Commercial Advertiser*, that it is time that our executive government should interfere in the matter, and adopt measures to prevent the introduction of the disease into this Province, by preventing the importation of neat cattle in toto, for a time at least. An ounce of preventive, the old adage says, is worth a pound of cure. If once the disease is imported, the extent of its injury, or the amount of its ravages, cannot be predetermined.

What strikes us as somewhat singular is the inefficacy of all modes of relief hitherto adopted. We have often thought that the treatment of the diseases of horses, &c., &c., or, in other words, that veterinary practice, is based upon no sound principle whatever. Much requires to be done in it before it can take its place as a science, a position to which it is deservedly entitled, on account of the importance to our social interests of the subjects on which it treats.—Not only in other diseases, but in the one under consideration we have seen most extraordinary remedies proposed; the last, sanctioned by good names, is its treatment by arsenic. This treatment advises the exhibition of arsenic in six grain doses intimately mixed with sugar. Arsenic is a Tonic and Antiperiodic,and we are certainly at a loss to assign a rationale to any curative influence which can be effected by it in this disease. This treatment has been tried in Scotland and, as we might have a priore expected, it failed. Inoculation with matter taken from a diseased lung has also been had recourse to, but without any bene-

fit; and, in fine, it is needless to specify the various treatments proposed, as none of them have proved satisfactory. We have taken this matter up confessing, however, but little acquaintance with veterinary science, for the purpose of suggesting a treatment, such, for example, as would in all probability be adopted, were the subject of disease one of ourselves, and that is the exhibition of Carbonate of Ammonia, or some other ammoniacal preparation, together with Calomel; the latter given in the evening, the former at stated intervals throughout the day. We know of no remedial agent better calculated than Ammonia to act as a general stimulant, rendering expectoration more easy, while at the same time it seems to modify the pulmonary secretion diminishing its viscidity and quantity. The administration of the calomel would tend to modify the inflammatory action going on, and to arrest the progress of its effects. We said that we think that such would be the principle of treatment of such a case occurring in the human subject, and that we are not sufficiently acquainted with the diseases of the lower animals and their management to indicate with precision the particular mode of treatment in a given case; but we think it our duty to throw out the above hint that, perchance, it may be taken advantage of in the proper quarter and tried. If tried and it fails, the treatment can be put alongside of those previously adopted.

Since the above was written we have learned that the disease has shown itself at Huntingdon; one farmer in that place having lost four valuable animals. We think that immediate measures should be adopted to prevent the disease from spreading.

PROFESSORSHIP OF ANATOMY AT WARSAW.

"Hirchsfeldt, the *Chef de Clinique de l'Hotel Dieu*, and great writer on the nervous system, with whose magnificent work on the anatomy of the nerves every anatomist is familiar, has been lately appointed Professor of Anatomy in the Imperial Academy of Warsaw. The appointment is remarkable, from the fact that it is the first instance of a Jew being allowed to hold office in Russia. The position was first offered to him on condition of his becoming connected with the Greek Church, which he refused, and the condition was afterwards waived."

The above has been handed to us by a friend, and we insert it with pleasure, as a most *ju*-dicious proceeding, and well worthy of imitation by other churches besides the Greek. A man's religion is an affair between himself and his Maker, and should never be permitted to interfere between him and an office for which his talents proclaim him better fitted than any other. This appointment under such circumstances is a marked homage to talent.

BOOKS, &c., RECEIVED.

A System of Surgery, Pathological, Diagnostic, Therapeutic and Operative, by Samuel D. Gross, M.D., Professor of Surgery in the Jefferson Medical College of Philadelphia, &c., illustrated by nine hundred and thirty six engravings, 2 vols. 8 vo. pp. 1162 and 1198. Blanchard & Lea, Philadelphia. Price $12.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT *MONTREAL* IN MAY, 1860.

By Archibald Hall, M.D.

Day.	DAILY MEANS OF THE: Barometer corrected and reduced to F. 32°	Temperature of the Air.	Dew Point.	Relative Humidity.	Ozone.	CLOUDS: Amount.	CLOUDS: General Description.	THERMOMETER: Maximum read at 9, P.M.	THERMOMETER: Minimum read at 7, A.M.	WIND: Its general Direction and Mean Force from 0 Calm to 10 Violent Hurricane.		RAIN AND SNOW: Rain in 24 h'rs read at 10, A.M.	RAIN AND SNOW: Snow in 24 h'rs read at 10 A.M.	RAIN AND SNOW: Total rain and melted snow.	GENERAL OBSERVATIONS.
	Inc's.	°	°	0.100	0.10	0.10		°	°		0.10	Inch.	Inch.	Inch.	
1	30.041	58.0	40.3	.49	2.2	3.3	Cir. St.	70.2	45.3	S.	3.6	.....	.....	.....	
2	30.129	55.4	44.5	.66	2.0	6.6	Cu. St.	67.4	45.4	E.N.E.	1.3	.....	.....	.....	Solar & Lun. Halo, Rad. 25°.
3	29.988	59.7	44.7	.58	1.0	2.6	Cir. St.	71.2	46.3	N.N.E.	0.6	.....	.....	.....	Faint Solar Halo.
4	29.927	62.0	44.1	.48	1.0	6.3	Cir. St.	73.0	52.2	N.N.E.	2.3	.....	.....	.....	
5	29.963	61.2	43.8	.48	1.5	0.6	Cir. St.	73.2	47.8	N.N.E.	2.3	.....	.....	.....	
6	29.890	63.4	44.4	.49	2.5	5.6	Cir. Cu.	76.3	46.9	E.S.E.	1.3	.....	.....	.....	Solar Halo.
7	29.829	59.9	46.2	.60	3.0	9.6	Cu. St.	71.2	54.0	N.N.E.	2.3	.....	.....	.....	
8	29.964	61.5	51.7	.71	2.5	9.0	Cu. St.	75.0	48.0	N.N.E.	3.0	Inap.	.....	Inap.	
9	30.001	67.2	58.0	.74	2.5	8.3	Cu. St.	75.4	51.0	S.	3.3	.....	.....	.....	
10	30.065	66.3	57.3	.74	3.5	7.6	Cu. St.	76.5	56.0	S.	3.0	0.02	.....	0.02	
11	30.130	66.4	53.2	.64	3.5	6.6	Cu. St.	76.0	58.0	S.	2.6	0.05	.....	0.05	
12	30.122	70.5	56.2	.64	2.2	3.3	Cir. St.	80.8	55.2	S.S.W.	2.0	.....	.....	.....	
13	29.974	70.3	52.6	.54	2.5	7.0	Cu. St.	80.5	57.8	N.E.	2.3	.....	.....	.....	Solar Halo, Aur. with str's.
14	29 943	58.4	40.9	.49	3.5	5.6	Cu. St.	68.9	52.0	N.E.	5.0	.....	.....	.....	Perfect Solar Halo.
15	29.957	55.4	41.7	.59	2.2	2.3	Strat.	68.2	41.4	E.N.E.	3.3	.....	.....	.....	
16	30.048	53.9	41.0	.58	1.5	1.3	Cir. St.	66.5	47.2	N.E.	5.0	.....	.....	.....	
17	30.157	57.1	41.4	.52	1.0	0.0	0	67.0	41.0	S.E.	2.3	.....	.....	.....	
18	29.917	62.1	52.1	.71	5.2	8.3	Cu. St.	69.1	51.2	S.	3.3	.....	.....	.....	
19	29.285	59.3	56.1	.91	9.0	9.6	Nim.	66.2	54.5	S.	3.0	0.40	.....	0.40	Squall 3.30 p.m., heavy rain.
20	29.710	39.2	31.3	.71	6.0	8.0	Nim.	56.3	35.0	N.W.	4.3	0.76	Inap.	0.76	Ice ¼ inch, circles round sun.
21	29.918	48.6	35.2	.54	6.5	7.3	Cu. St.	54.0	32.0	E.N.E.	1.3	.....	.....	.....	
22	29.851	51.2	45.9	.82	8.5	10.0	Cu. St.	56.7	45.5	W. S.W.	1.0	.....	.....	.....	Auroral light with stream's.
23	30.033	58.0	47.5	.69	6.0	3.3	Strat.	64.5	45.7	E.S.E.	1.3	.....	.....	.....	
24	29.998	60.3	52.9	.77	5.5	5.6	Cu.	67.0	52.0	E.N.E.	1.6	Inap.	.....	Inap.	
25	29.894	65.3	52.9	.65	4.0	3.3	Cu.	73.0	59.0	S.W.	1.0	.....	.....	.....	
26	29.751	65.4	52.0	.62	6.0	9.0	Cu. St.	77.8	52.2	S.	2.6	.....	.....	.....	Lightning.
27	29.676	57.5	50.6	.77	8.0	10.0	Nim.	64.6	54.3	S.S.W.	3.6	0.25	.....	0.25	High wind at 11 a.m.
28	29.806	58.9	53.6	.84	7.0	5.6	Cu.	65.0	55.5	N.N.E.	1.6	0.13	.....	0.13	
29	29.930	66.6	55.6	.70	4.0	5.0	Cir. Cu.	75.6	52.5	S.W.	2.0	.....	.....	.....	Fog early a.m. Solar Halo.
30	29.747	64.9	55.5	.73	6.5	7.3	Cu. St.	73.6	59.5	S.	2.0	.....	.....	.....	Thunder 1 p.m., lightning
31	29.602	67.7	61.3	.82	7.5	7.6	Cu. St.	76.0	60.2	W.	3.0	0.02	.....	0.02	[at night.
S's	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.63	Inap.	1.63	
M's	29.911	60.39	48.65	.655	.....	.....	.....	70.21	50.14	.....	.....	.....	.....	.....	

ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT *TORONTO* IN MAY, 1860.

Compiled from the Records of the Magnetic Observatory.

Day.	DAILY MEANS OF THE: Barometer reduced to 32° Fah.	Temperature of the Air.	Relative Humidity.	Amount of Cloudiness.	THERMOMETER: Max'm read at 6, A.M. of next day.	THERMOMETER: Min'm read at 2, P.M. of same day.	Dew Point at 8, P.M.	WIND: General Direction.	WIND: Mean Velocity in Miles per hour.	RAIN AND SNOW in 24 hours, ending at 6 A.M. next day: Rain.	Snow.	Total rain and melted Snow.	Ozone in 24 hours ending 6 A.M. of next day.	GENERAL REMARKS.
	Inches.	°	0—100	0—10	°	°	°			Inch.	Inch.	Inch.		
1	29.7103	41.30	77	10	47.2	42.0	36.0	N. 36 W.	11.82	0.033	.....	0.033		
2	.8357	46.90	79	5	57.0	32.5	43.5	N. 30 W.	7.49	.....	.....	.....		Hoar frost 6 a.m.
3	.7140	53.58	63	5	63.8	40.2	44.0	S. 63 W.	3.50	0.015	.....	.015		
4	.6397	56.32	69	1	69.0	47.8	45.5	S. 37 W.	3.99	.....	.....	.....		
5	.6282	56.13	66	6	67.2	48.0	48.0	S. 43 W.	2.03	.....	.....	.....		
6	.....	Sunday	.....	.....	68.8	44.2	.....	N. 80 E.	5.34	.....	.....	.....		
7	.5078	62.02	79	7	73.2	50.3	58.0	N. 63 W.	3.82	.....	.....	.....		
8	.5153	59.78	82	10	64.5	56.2	57.5	N. 9 E.	7.86	.080	.....	.080		
9	.3832	57.02	89	10	63.2	54.2	53.0	S. 68 E.	9.41	.935	.....	.935		Heavy thund. storm with heavy rain and hail stone.
10	.5625	54.03	90	10	63.0	52.0	57.0	N. 61 E.	5.77	.210	.....	.210		
11	.7248	57.03	84	9	22.5	50.8	52.5	N. 49 E.	9.11	.055	.....	.055		Auroral light.
12	.7515	58.45	83	7	65.0	52.0	54.0	N. 52 E.	9.32	.....	.....	.....		Rainbow, 7 p. m.
13	.....	Sunday	.....	.....	68.8	53.2	.....	N. 59 E.	5.57	.....	.....	.....		
14	.5920	61.18	67	2	70.0	52.4	50.5	S. 82 E.	4.70	.....	.....	.....		Faint Auroral light.
15	.6618	56.12	63	0	63.2	52.2	48.0	N. 75 E.	4.80	.....	.....	.....		
16	.6678	59.42	59	0	67.0	46.6	44.0	N. 65 E.	7.32	.....	.....	.....		
17	.7205	55.03	68	4	60.0	49.0	47.0	N. 56 E.	9.68	.....	.....	.....		
18	.4257	54.05	88	6	61.8	48.5	54.0	N. 64 E.	4.97	.052	.....	.052		Auroral light and streamers
19	.1600	52.25	76	7	60.1	49.0	43.5	N. 72 W.	16.62	.147	.....	.147		
20	.....	Sunday	.....	.....	53.0	37.0	.....	N. 36 W.	10.54	.095	.....	.095		
21	.4188	41.50	85	10	44.6	38.8	39.0	N. 55 E.	11.77	.015	.....	.015		
22	.5807	51.43	78	3	63.0	40.8	56.5	S. 12 W.	8.22	.135	.....	.135		
23	.7732	50.83	75	1	61.8	41.0	48.0	S. 27 E.	3.37	.....	.....	.....		Faint Aurora.
24	.6857	54.58	70	6	62.0	44.4	48.0	N. 59 E.	4.89	.....	.....	.....		Auroral arch and streamers.
25	.5303	61.43	62	5	69.2	52.0	49.0	N. 57 E.	7.76	.....	.....	.....		Thunderstorm.
26	.3013	59.40	80	4	71.0	49.8	60.0	N. 1 W.	8.83	.013	.....	.013		Thunderstorm during day.
27	.....	Sunday	.....	.....	65.6	50.2	.....	N. 55 W.	6.17	.010	.....	.010		
28	.5397	57.02	74	3	67.5	47.0	55.0	S. 82 W.	4.56	.....	.....	.....		
29	.5725	59.47	71	9	68.6	49.5	54.0	N. 57 E.	8.97	.005	.....	.005		Thunder storm at night.
30	.3193	62.95	79	6	74.5	53.5	56.0	S. 17 W.	6.57	Inap.	.....	Inap.		
31	.3570	59.15	85	10	67.0	56.5	56.0	N. 76 W.	7.79	.020	.....	.020		
S's	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.820	.....	1.820		
M's	29.5659	55.52	76	6	63.97	47.79	50.37	N. 26° E.	7.17	.....	.....	.....		