## DOMINION

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## Original Articles

## POPULAR DELUSIONS ABOUT THE INSANE.

By Daniel Clark, M.D., Toronto. Medical Superintendent Asylum for Insane.

The word lunatic has conveyed erroneous impressions to the public in respect to the insane. The inference is drawn that the moon has to do with, or in some mysterious way influences, the mentally deranged. There is a notion afloat that our lunar neighbor affects agriculture in respect to the sprouting and growth and ripening of grain. Many farmers will not sow grain except during certain phases of the moon. They will not kill swine unless the moon is in the right quarter, as they say the pork will keep better at this benign stage. A large number of superstitions c'uster round the supposed potency of lunar influences. This is very natural when the ignorant observe its attractiveness in tidal relations. This occult agency of the moon was expected to have a perturbing effect on the insane, hence the expression "moon struck." There is no foundation for this delusion, as physical and mental diseases obey more powerful laws in their operation than any causes which could: operate emanating from our satellite.

It is also supposed by those who do not come in daily contact with the insane, that all those with mind disorders are maniacs, hence the nickname mad-house. The stage has cone much to perpetuate this error. The Ophelias are decked out in the most absurd way, from straws in the hair to rags on the body. They are supposed to be always jabbering inanities, or shouting verbal nonsense, or muttering incoherent sentences. All this is a travesty on the facts as seen in the wards of an asylum. There are few towhom the term maniac could justly be applied. There is some-
times excitement; occasionally there may be sentences with exclamation points ; those rhetorical flourishes may be accompanied with gestures which elocutionists might envy in respect to appropriateness; but there is little of the raving madness and delirium so divelt upon by actors and novelists. The extravaganza belongs to the ideal more than the real. The demented insane, as a rule, seldom speak, and if so, it is usually in monosyllables. They sit in semi-stupidity on benches or in chairs all day long. Occasionally the higher intellects in this class may take the body for a walk or do some mechanical work in which they are accustomed to be cmployed, and which thereby has become largely automatic from repetition. In sane and insane, habit becomes a second nature.

These persons compose the larger part of the asylum population. They are designated as quiet and harmless chronics. Such scarcely ever become excited during the long course of years which many of them live. If they are comfortable in their person and surroundings, if they have enough to eat, and have plenty of time to sleep, their cup of happiness is full. Past troubles cease to worry; past afflictions have i : poignancy in the present; past loves and hates have lost their intensity; past plenitudes, honors or disgraces are only as faint retrospects which have no abiding interest to such, hence the erroneous idea that all the insane must, of necessity, be very miserable has no existence in this class of clements. In fact, those in whom is mental deprivation of a lower grade still have no more intellect than the congenital idiot. It matters not how intellectual these persons may have been, and how capable they were to engage in the ordinary business of life, that day of mental grasp has passed away, and now they hopelessly and helplessly drift along the stream of time, heedless of their surroundings, of passing events, of friends or foes. Some of this class of mental negation would sit by the fire and burn before they would move away; they will allow flies to settle upon their eyelids, and not even attempt to brush them off; in short, they have ne more idealty nor decency than has the child of six months of age.

The most dangerous of the insane are not the so-called maniacs but the delusional, who may be very quiet in language and conduct, but who may at the same time be hatching mischief against themselves or others. The patient who is continually threatening to kill himself or someone clse is not as dangerous as are such as give no sign, but who are cunningly devising ways and means to accomplish their purpose. Lethal weapons are found and secreted; the opportune hour is sought out, and laxity in oversight is at once taken advantage of. Promptitude is not wanting to act in anyone who has a dominant false idea prompting to action. The devil may order such to hang, burn or mutilate themselves. The demon must be obeyed, as his influence is paramount. Some officer or servants have been conspiring against the insane man, it
may be to poison him, or kill him in some other way, so, in selfpreservation, he must slay his enemy. Many such acts are committed because he is urged to them by a direct command of the Lord, or of satan. He may hear his voice or the voice of one of his prophets ordering him to do these things, therefore, it is a paramount duty to obey a divinc or a diabolical command. The moral is to carry out the imaginary belest and the cthical features from a sane point of view are never thought of. Franted the premises, the conclusion is logical.

Such insane with homicidal propensities kill from the promptings of such an inward monitor. They are put into the dock, indicted for murder; their mouths are shut; the evidence is against them; a jury looks merely at the act, and have no opportunity to study the actor, nor experience to know anjthing about insanity, nor capacity to analytically weigh evidence; so the verdict is "guilty," and the sentence, of necessity, must be hanging. The pages of history arc bespattered with the blood of these innocents if "malice aforethought" is the fulcrum idea in homicidal responsibility, and want of it coextensive with want of accountability. Mothers and fathers kill their families, whom they fondly love when they are in their right senses, because of the orders of some inward prompter, or because of a blind and irresistible impulse incited by brain diseases; but irresistible and, it may be, without motive.

Insanity is a degenerative process, and, as might be expected, in chronic condition is a step backward towards chilchood and childish ways. The same trinkets, trifles and fancies which amuse the child delight the insane in much the same way. In this respect also a majority of them never combine in concerted action with others. They have few, if any, confidences, hence conspiracies of lunatics are seldom heard of in asylums. The overt or cunning acts are usualiy done by individuals only and alone. Also, as is the case with children, they are selfish. Number one is the first consideration with those who have reached this low stage of mental enfeeblement. In children the appreciation of the rights of others has not reached the height of moral obligation in development ; in the chronic insane, this capacity has been removed in the retrograde steps of disease. The order of building up has conversely taken place in the pulling down. The moral nature is the first that gives way in the lesion of the mind. The sense of right and wrong is the last faculty to be developed in the natural growth of the individual from childhood upwards, so it is the first to suffer in mental alienation. The order of destruction downwards is in order as follows: Morals, intellects, instincts and automatic animalism.

Another theory which is very popular, and has been prevalent for many years, is that insanity is purely a mental disease-simply
that and nothing more. The believers quote the dramatist's poetic interrogation, "Canst thou minister to a mind diseased ?" Disease means a departure from the normal standard of health. If the mind can become the subject of disease in any way analogous to the mortal body, then it must die, and for it there would be no immortality except through a resurrection. Of course, were a man a tripartite being, as the theologians say, and composed of body, soul and spirit, then two out of the three existences might perish, leaving one entity to possess the attribute of perpetual continuation. Physiologists hold man to be composed of simply body and mind, and is thus a duality. The materialistic class mean by this an organ and its secretions. The metaphysical physiologists mean two existences in co-operation, the one being simply matter and the other being a substance without the primary and secondary qualities of matter. Whatever view may be taken, it is interesting to note how inter-dependent these twins are upon one another. A fever will cause delirium ; dyspepsia will produce hypochondria; opium or any narcotic, in large doses, will defy volition and induce stupor and temporary oblivion ; our nightly sleep must be preceded by a slow pulse, languid and deficient blood circulation in the brain; and the wise man becomes a fool over too much wine. On the other hand, a hearty appetite is instantly destroyed by bad news; sleep is banished by worry or anxiety, and gladness will act at once as a bodily tonic and stimulant. In all these causes and effects it is the body alone which determines the conditions.

Insanity is alvays a bodily disease, and mental or moral perturbations are occasions, not causes, of brain disease. Were the organ in tune, the organist could bring harmony and melody out of it to the utmost capacity. No two of us have the same number of stops or octaves; but to the extent of our mechanism and its capaciiy, so far can our mental capabilities go and no further. The sound mind is hedged in by its physical and instrumental environment. No amount of culture, or training, or opportunity could produce genius, or even talent of a high order, in the vast majority of our race. The potentiality is not there, and never can be in the individual stamped with mediocrity. Such may never reach their best ; but the utmost capability is a fixed boundary, beyond which it is impossible to pass. The transcendent sons and daughters of genius cannot be made out of congenitally ordinary organization, any more than can good coffee be made out of an ordinary or inferior coffee bean. The mortal with thirty ounces of brain must perforce be a child or an idiot; but the brain of sixty ounces, healthy and well urganized, has in it the possibility or mental scope and vigor. On the other hand, the brain of fifty ounces in weight, well organized, is much more useful to the mind than is one of sixty ounces, but primitive in its construction, just as a pound of steel has more wear and elasticity in it than a pound of iron. As
might be expected, the brain of an educated mortal when diseased is more likely to recover its equilibrium than is that of low organization, in which, consequently, there is weak mental power, so to speak; the former has a vitality and rebound to it which the latter does not possess, and is thereby so apt to degenerate int, childishness and mental deprivation, which is virtually the tomb of the mind. In weighing probabilities of recovery from insanity, the existence of education is one of the factors on the favorable side of the equation in my experience, taking the averages by causation and results.

It is curious and interesting study to note the various theories in respect to mind and its manifestations, and, as a corollary, the various views as to what is meant by a diseased mind. The pendulum of thought, in its definitions, has swung from the one extreme to the other since the days of Hippocrates. To classify generally, there were three opinions which held sway for longer or shorter periods during the centuries. In one it was held that mind. and brain were simply the product and the organ, in short, the physical entity and its secretiou. This theory goes under the much anathematized name of materialism. Cabanis says, "All intelligence consists in sensation, and all the sensation resides in nerves"; and, "as the liver secrets bile, so does the brain secret mind." Fenchtersleden asserts that "the operations of the mind are emanations from those ot the body, and, of necessity, mental disorders must be merely bodily ailments."

In recent days, Tyndall put the same idea as follows: "Theanimal body is just as much the product of molecular force as the stalk or ear of corn, or as the crystal of salt or sugar. The formation of a crystal, or a plant, or an animal is a merely mechanical problem. Not alone the mechanism of the human body, but that of the human mind i.self-emotion, intellect, will and all their phenomena - were once latent in a fiery cloud."

In a word, there is a school of materialistic physiologists whoreduce man physically, mentally and morally to a mere machine. Mental action and moral judgments are mere secretions of nerve activity. The initiatory force to set in action our volitions, reasonings, imaginations, affections, emotions, and even our consciousness, is always and only nerve energy or brain function. There is nomind entity behind this organ, directing or controlling it in any degree. The " $I$ " is only a resultant of the "not $I$ " in action, and we are all mere machines obeying absolutely perforce the behest of brain atoms or molecules in concerted operation. There is no spontaneity independent of, in the least degree, the mandate of this bodily autocratic taskmaster. I vainly imagine that my mind is dictating commands to my hand to do the writing I am now engaged in. It is a delusion according to this doctrine, for the first movement was that of a nerve atom or. a community of atoms.
in concert, and out of it, in some way, sprang up an idea and then a volition. How the atoms came to be cognizant of the necessity of the moment in this and all ideality has not been explained. I have the conceit in my conscious being that I am making my brain a servant of my ideation in the conception of thoughts in this monograph. I feel within me a certain liberty of action to do or not to do, within certain circumscribed limits, according to my individual capacity, which no reasoning can banish from my consciousness and which is manifested to me in my daily experience.

According to the modern and materialistic school of physiologists this is a delusion of mine, and to overthrow the evidence of self the data of consciousness and its presentations are ruled out of court. It is the chicf witness for the defence, hence its evidence must be rejected.

These speculations would do very little harm were it not that of necessity they lead to a fatalism in respect to human thought and action. There can be no ethics and no responsibility in such a system of belief, and the sane, with the insane, cannot be accountable for actions, volitions and moral judgments which are purely mechanical, and in which can be no spontaneousness. It will be scen that this theory is not merely speculative, but when applied to human conduct is of paramount practical importance.

It is easy to see that the idea of man being simply a beautiful piece of material mechanism, with no controlling power behind it, is a doctrine far-reaching in its results, and not only in ethics and theology, but also in practical medicine in relation to morbir! minds. There must, of necessity, be in it a fatalism, which would paralyze all endeavor to help ourselves and our fellow-man, fo: if there is nothing to have a hereafter, and if the mind must become non-existent when the brain, its author, has mixed with the clods of the valley and dissolved into its kindred dust, it would be a merciful deliverance to free all the afflicted from their earthly bondage by an euthanasia. It would be a refinement of cruclty to prolong the lives of those afflicted with incurable, and it may be, painful diseases, and killing could involve no moral guilt if mind be only a brain secretion with no spontaneity, and no choice of action, and no moral obligation. There can be no murder when there is no responsibility, and law has no right to punish a mere machine. A theory of this kind is untrue, it is mischievous and is far-reaching in results. It flies in the face of conscious freedom and innate moral judgments.

That insanity is essentially and purely a disease of the mind is a form of error which has gone through many phases of thought during the last 2,500 years, in fact since the days of Socrates. Were these opinions merely speculative and, consequently, harmlese, no refiections could be cast on our ancestry in respect to the e treatment of the insane. Such was not the case, because they were
at once accepted as an axiom in that such were devil-possessed, and to-day, Anno Domini 1900, several acquaintances of mine, including clerical as well as lay persons, cling to this idea. The result was cruelties inflicted upon the insane, a mere recital of which would make the very blood run cold. These barbarities were inflicted to a greater or less extent until the beginning of last century. This demoniacal delusion, which meant that a personal devil had, by occupancy, possession of the individual in body as well as soul, was modified by the idea that mental dethronement was simply" a perversion of the soul, in fact, equivalent to sin." "The mind was the immediate seat of the disorder, and could be clearly traced to its origin sin, error, passion."-(Heinroth.)

Dr. Burrows in his standard work, and modern at that, says : "Madness is one of the curses imposed by the wrath of the Almighty on His people for their sins." This erroneous idea was universal, and still prevails, not merely among the ignorant, but also where the school-master is abroad. It is a vicious dectrine which holds that all sinners who become insane are so because of sin as a cause. This does not mean simply violaters of physical law, but also those who are morally bad. To become insane means wickedness. The good, the gentle, the noble in character, and those of whom the world is not worthy, have become insane by the tens of thousands, while many a vile wretch has escaped this dire infliction. Many of our citizens have had mental aberration because of hereditary tendencies in which they could have no part or lot, because of that inscrutable law of transmission-not of clisease, but of liability thereto-if all the conditions necessary to evoke the latent weakness are present. A sunstroke, a fever, maternity, a blow on the head, worry, great afflictions, mental anguish, over exertion, heredity, are among the many causes of insanity; but they come upon saint and sinner without discrimination as to moral guilt or worth, and without mercy.

## THE SURGICAL TREATMENT OF CLEFT PALATES.*

BY DR. TRUMAN W. BROPHY, CHICAGO,
Dean of the Chicago College of Dental Surgery; Dental Surgeon to the Presbyterian Hospital,
and Professor of Demal Pathology lush Medical College.

Delivered before the Toronto Dental Society, February 25th, ryoz.
Mr. President and Gentlemen,-Before entering upon the discussion of this subject I desire to express to you my deep appreciation of the round of applause which you so heartily gave yesterday on the reading of a telegram from my distinguished colleague, Prof. C. N. Johnson, who was formerly one of your

[^0]citizens; and, while the Dean of this institution, took occasion to remark that you are not in favor of annexation to the United States, I desire to state that we have annexed, to a very great extent, citizens of your country, and in the institution with which I am connected at least six native-born Canadians hold high positions as teachers.

The subject of mal-formations of the palate, or defects of the palate-congenital clefts, accompanied with hare-lip-has called forth the very best efforts for their correction on the part of surgeons, extending over a period of many years. It remained, however, for the French dentist, La Monier, in 1764, to first suggest the propriety and probability of approximating the divided edges and uniting them. So far as surgical history informs us, it remained for Roux, in 1819, to make the first operation, immediately followed by Warren, of Boston, and Ferguson, of England, and, later, by many surgeons throughout the world. The complaint thet was made by the early surgeons, and is still made by the surgeons of the present time, is the difficulty in e.pproximating the edges of the palate; and, when this was once done, frequently trouble arose in the cutting out of the sutures, and, consequently, failure of the operation. Professor Agnew saw fit to divide the tensor palati muscles with a view to taking off tension; but in doing this he destroyed the functions of the palate to a very great degrce. By this division, the muscle which arises at the scaphoid fossa of the sphenoid bone, and the cartilaginous portion of the Eustachian tube, passing downward and around the hamular process of the sphenoid bone, to be inserted into the soft palate-the division of this muscle near the hamular process is followed by a retraction of its segments to such an extent that the edges do not re-unite; besides, in the division of the muscle at this point we get a mass of cicatricial tissue, produced within the palate, which interferes with its function. It prevents the palate from retracting and contracting, and moving in a natural manner. Besides, the division of that muscle means something more, not only the absolute interference with the function of the palate, but it means that the other function, which is to dilate the pharyngeal orifice of the Eustachian tube, is interfered with somewhat. The experience of all men familiar with palatal surgery is that defective hearing not infrequently follows the division of the muscles named. This defective hearing is due to the fact that the muscle is inactive instead of dilating the orifice of the tube, as it would, had it not been divided. The orifice closes or fails to open, and defective hearing is the result.

Dr. Brophy then proceeded to show, by means of slides projected upon a screen, how to avoid these lateral incisions-how to produce a better palate by employing another method, which is
not followed by the formation of cicatricial tissue, nor does it interfere with the function of hearing.

## The Pictures on the Screen.

1. Showed the ordinary form of cleft palate-congenital palate in an adult. Nothing particular, except the fact that we have

defective arrangement of the teeth-an insufficient number of teeth, the lateral incisor being frequently missing and the other teeth in the immediate vicinity being irregular. Single hare-lip present. If bi-lateral, we have defect upon the opposite side also. It is a mistake to remove the intermaxillary bones, as is so frequently done, because they may almost always be brought back
to their proper place and made to serve the purpose for which they were intended. We have depression of lip when these bones are removed, especially noticeable when we look upon it in profile.
2. Showed the instrument that Dr. Brophy uses ifor the purpose of removing the periosteum from the bone in the performance of this operation. Instead of separating the bones, we denude the periosteum from the bones and hring the two sides


Fig. z.
together; cleave the muco-periosteum, denuding the bone and bringing the parts together. He illustrated how this is accomplished by making a comparison of the elevated railroad in Chicago. When the bridge is open for vessels to go through, we compare that to the cleft of the palate. In closing the palate-when we want to close the bridge-we denude all of the bone of the periosteum and then bring it down and approximate the edges, and in that way lower the elevation of the vela and secure coaptation of the divided edges of the palate.
3. Showed the technic of surgery in the adult, or in patients over five months of age. Three operations Dr. Brophy makes for the closure of congenital cleft palate. He now described the operation in the adult. The picture on the screen shows left hemisphere of the face. Longitudinal section of the bones is seen. He showed where the muco-periosteum was carried away from the bone and brought downward, so as to lower the vela and make it possible to bring it over and approximate with the opposite side. He here called attention to one special means of approximating the soft parts without lateral incision. After the bone is denuded, we go back to the posterior border of the horizontal plate of the palate bonc. Here the muco-periosteum

is. Posterior border of horizontal plate of left palate bonc. B. Velum separated from muco-periosteum of nasal surface of palate bone. C. Velum separated from the hard patate, and the palate lengthened so as to restore palatal function. D. Periostcutn denuded from hard palate. E. Palatal mucous membrane. F. Bones denuded of membrane. G. Na ${ }^{-1}$ muco-perioskum. H. Pusition occupied by palate before operation. I. Posterior wall of the pharyas.
clings to the superior or nasal surface of the jone, and, consequently, the palate cannot come over to unite vith the opposite side. When it came to the approximation of the edges of the soft palate, Sir William Ferguson thought it was necessary to make lateral incision to relieve tension. He did not well realize that the adhesions of the nasal muco-periosteum prevented bringing the parts together; hence he made lateral incision. To avoid making these lateral incisions-to avoid disturbing the palate at
all-and to avoid producing any cicatricial tissuc, ve adopt a very simple plan. We take hold of the palate at a point indicated by the speaker and lift it up a little, and with a pair of scissors cut off, on both sides, the nasal muco-periosteum just at the distal border of the horizontal plate of the palate bone. That enables us to bring the part immediately over to the opposite side. Consequently, when you lift that part away and draw it over, thereby the palate lengthens so as to produce a better palate, and, at the same time, we avoid making these incisions through the tissues, an important step in producing a good palate. The cicatricial tissue leads to a dense, stiff, almost unyielding mass, which reaily makes a very defective paiate indeed; and it is through that-through the fact that these tissues are so rigid and unyielding-that so much criticism has been made upon the surgery of the palate. The gentlemen who are devoting much time to the construction and consideration of artificial vela, hold that up as an objection to palatal surgery. LTaving the mucoperiosteum denuded from the bone up to the incisive foramen-the membrane has been sut'off on the supericr surface of the palate, the nasal surface, and then the edges pared-we come to the soft palate, and here we avoid removing any tissue whatever. Instead of doing this, as was formerly done, we pass a knife along lengthwise of the edges of the palate, splitting it, thus securing a freshened surface. The tissue may be brought over as soon as the incision is made along the border of the cleft. We get union and avoid the loss of any tissue whatever in that part of the palate. In the soft palate we almost invariably get union. After we have brought these parts over together, if we have carefully approximated the edges of the periosteum, we may rely upon producing a good, hard palate. One of the functions of the periosteum, as you know, is to repair and replace bone. When we bring the mucous membrane of the periosteum over and unite it with the opposite side, we may rely upon getting a new, hard palate.
4. This picture shows surgery of the palate, with the adaptation of sutures, from the distal aspect. We have here lifted the muco-periosteum away from the bone on either side and brought it over so that it meets the opposite side. We have introduced straight silver sutures-No. 22 silver wire, according to the American gauge. Then we have lead plates of the same thickness-22 American-ànd the sutures twisted together with tension made upon them so as to hold the parts steady. In the picture you will observe coaptation sutures not having any strain upon them whatever. It is hardly possible to estimate the value of these silver sutures thus adjusted. The sutures are passed directly through the tissues. They are carried through and twisted upon the lead plates; and it is these which hold the parts in quiet contact until union is complete. The lead plates act as splints.

This is in accordance with an old principle in surgery-when a part is in an abnormal condition, put it to rest. We put these parts to rest; we kecp them quiet. We introduce an applianse which will make the cutting out of the sutures absolutely impossible, which is a consideration of inestimable valuc. There is no way by which these sutures could get out. A general slough might take place and dragging down of the tissue, but almost always they remain until the tisrues in the median line unite.
5. Congenital cleft palate. This picture was taken from the work of Dr. Kingsley, of New York, a very valuable work on the

A. Muco-periosteum disected away from the palatal surface of the superior maxille. B. Silver tension sutures. C. Conptation sutures. D, D. Lead plates.
subject of phonation. The photograph was made from his book, showing congenital cleft palate, and showing outlines of an obturator which he constructed. In such cases obturators are unnecessary. A surgical operation would always be much better.
6. Picture showing the adaptation of the lead plates and silver sutures from palatine surface. The sutures are carried through the lead plates and the wires twisted together ready to be bent up.
7. Here you will observe the coaptation sutures introduced. The coaptation sutures should be introduced before the lead plates
are finally set up to their places. Leave the plates outside of the mouth until the coaptation sutures are introduced because you can put them in more easily. Introduce the sutures first, and leaving them alone so as not to lose any of them and allowing them to


Figs. 6 and 7.
A, A. Yead.plates. B. Silver tension sutures. C. Coaptation sutures not yet tied.
remain until we have set the plates up, and brought the tissues in contact, and then finally make fast these sutures.
8. Showed suture needles especially adapted to this work of carrying the sutures through the palate. We cannot freely carry
silver sutures through with a needle, but with this we carry a strong silk suture through, and having a loop through to the median line, slip one loop through the other loop, and bring one all the way across. Now we have introduced the silver suture, drawing out the slip and leaving the silver suture in its place. The silk acts as a provisional suture. Introduce the needle at a point


Fig. 8.
easily seen, carrying it through and upwards and out at the opposite side.
9. This picture showed the parts adjusted. The lead plates in little different position. The wires are twisted on one side and then on the other, and then we have forced the two sides together. We have the parts united.
10. A drawing from life, illustrating defective palate, one upon
which operation was made many years ago. The patient had to overcome this defect by the use of an obturator. One of the demonstrators of the College brought him to me (Dr. Brophy) to know if I could do anything for him. I would lengthen his

palate. We proceeded to lengthen his palate. In adults having cleft palate there is development of the palato-pharyngeal muscles far beyond the normal. They are broader and stronger and thicker. There is a contraction, a mobility and activity in these muscles, which we do not have in those having normal
palates. A number of years ago Dr. Brophy decided that in cases of this character, in all cases of short palates, he would splice these muscles, bringing them up and uniting them so as to lengthen the palate to a considerable extent. We made an incision, taking away about two-thirds of the palato-pharyngeal


Fig. ro.
Drawing from life, showing congenital defect of velum and complete absence of azygos uvula (A).
muscle and then brought it over, freshening the edge and uniting it with the opposite side.
II. Shows the results of the previous picture, making a very good palate for the man; and he said he would not, under any circumstances, go back to the artificial vela. There is no comparison between the artificial vela and the palate that is natural,
or nearly so. The surgenn would not attempt to supply an artificial limb if it was within his power to preserve and make useful the natural one; and so it is with the palate when with surgical methods we are able to produce one which is natural, and one which will enable the patient to go on through life without being subjected to all the embarrassments that one is subjected to who is tied down to an artificial one. As in the case of the


Drawing from life of the sane case after operation for lengthening velum and making uvula by uniting in the centre onc-half of the over-developed palato-pharyngeal muscles (A).
general surgeon so it is in the case of the palate. If we have not the ability to produce a palate of the tissues to serve a patient then we will, as a last resort, substitute an artificial one.
12. Now we come to a part of the subject more interesting to me, said Dr. Brophy. It is transfixing of the bones in infants, and the making of palates for them. When this matter was first
suggested some held up their hands in wonder and disapproval. Does it not seem reasonable that we may bring these bones together in early infancy, when more than half the tissues are organic, when the bones are scarcely one-half calcified, saving these children embarrassment and helping them to speak? If not operated on in early infancy, when they go to school, when they have reached early youth, or manhood or womanhood, they find that they are practically isolated from the rest of humanity. It is possible to successfully operate in early infancy. One day Dr. Brophy brought before a class of students, his first patient, a little mite of ten days old. The patient was anesthetized, and the bones were forced together and united. This case was reported


Fig. 12.
A, A. Silver tension sutures. B, B. Lead plates. C, C. Germs of the first temporary molar teeth. D. Cleft palate.
at the Dental Congress at Chicago in 1893, and there was great criticism at the meeting. Kingsley, in an article published later, declared that Dr. Brophy had operated without the child's consent, and that such operations were not warranted, and that the defect or abnormality would be greater than that which had previously existed. The abnormality would be worse. The picture shows a vertical section in the superior maxillary bones of the child. The antrum shows up as a black spot. It is very small indeed in a young child. Section shows nasal cavity and vomer. This is in
a child under five months who is as amenable to successful surgical treatment, as amenable to success, as any other surgical work is. At the meeting in Patis last year Dr. Brophy presented some statistics of 211 operations he had performed on children under six months without a death. It is only justice, however, to say that the second patient upon which he operated after returning home had died. He had done a total of 236 operations up to the date of the Dental Society's meeting under six months, and but one death; and it would be only fair to say that in that case the child made a good recovery from the operation, but ten or twelve days thereafter developed pneumonia and, later on, died. The parts had united, but the child was taken ill and died. French surgeons


Drawings from careful measurements of casts from life, showing relative positions of upper and lower jaws in the case of cleft palate in a young child. The dotted squares are made in exact proportion to the width of the respective alveolar processes at corresponding points. The large square is the width of the cleft greater than the smatler square. When the cleft is closed the squares will be of equal size, and consequently the teeth will occlude normally.
claim they operate only on children two years and up. They abandoned that and selected from the ninth to the fifteenth year. It was a matter of great satisfaction that many of the surgeons there had not considered the matter from this standpoint. The picture shows the silver suture carried through the substance of the superior maxillary bones. Dr. Brophy here showed instruments adapted specially for this work. Showed Dr. Logan's forceps for forcing the bones back and bringing the parts into apposition. The instrument is the invention of Dr. Logan, of Chicago, who, for a number of years, has been Dr. Brophy's assistant.

In the further consideration of this method, we carry the sutures through in the manner described: bring one loop through the other, and then attaching to that the strong silver wire, No. 20, American gauge. It is necessary to have a strong wire, and No. 17 lead. The lead must be strong, because you cannot allow the lead to send. Do not depend upon the strength of the wire to draw the parts together. We make use of pressure, either by the hands or the forceps, and then force the parts towards each other, freshening the edges and freshening them well. They must absolutely meet. When the vomer comes down and forms a portion of the hard palate, we might find the hard palate almost together, providing we consider the vomer, or that bent portion of it. The bringing of the vomer over, and uniting the hard palate to it, would be a mistake, because in doing that we would have the soft palate widely separated. Make an incision through the vomer, lifting it away and bringing the hard palate proper, or the two sides into contact. If we do that we are able to force the tuberosities of the maxillary bones together. The objection to using a portion of the vomer is that we leave the tuberosities of the bone too far apart. It does not produce a good palate. In almost all cases of congenital cleft palate there is sufficient tissue, the defect is owing to the separation of the bones and the broadening of the upper jaw.
13. Shows that the parts have been forced so that they will meet, also shows black line which has been caused by the breaking of the bones. In cases where we cannot bring these bones into proximity we lift up the cheek and with a strong knife carry it through the bone above the lead plates and cut it off. After we carry it through the part of the bone which gives the greatest resistance-the malar process-and which prevents the bone coming over, with an instrument pry it over until we bring the parts into contact. A distinguished surgeon of Paris, in his discussion of this subject last summer, most heartily endorsed this method of operating. The patients did not die, because they were so young that the nervous system was not developed sufficiently to make it possible for them to sustain a serious shock. Professor Sebelean declared: "Your patients do not die because you do not divide any vessels; you do not produce any hemorrhage. If we do not divide an arter:' we divide some of its branches." Young children bear hemorrhage very poorly, hence they die. The surgeon in Paris said, "You avoid the vessels and so your patients recover, because there is no hemorrhage." We have little hemorrhage in these operations. If we get hemorrhage, what do we do? We have no hemorrhage except what little we get from the paring of these edges; if we should have hemorrhage we control it promptly by the use of hot tampons, sponges or gauze, out of water at I70 degrees, and thrust those hot sponges into the wound ; hem-
orrhage ceases, and we go on and complete the operation. This expedient has proven very satisfactory. The surgical procedure is fixed beyond the possibilities of doubt; it has passed beyond the experimental state. When surgeons everywhere become familiar with it, it will stand and be a fixed operation, and surgeons everywhere will operate by this method. The child grows up stronger and better after the palate has been closed. Some of the reasons why the operation should be done in early infancy are: The parts are soft and easily manipulated in early infancy. Children, during parturition, sometimes undergo quite serious wounds. Cranial bones are displaced and carried out of position. The dis-


Fic. 13.
A, A. Silver tension sutures. 13, B. Lead plates. C, C. Germs of first temporary molar teeth. D. Cleft closed. E, E. Muco-periosteum, forming extended wall of the triangular space by forcing the lower fragments of the bone inward. F, F. Lines of Fracture made by approximation of the palatal process. G, G. Triangular space on nasal'surface of bone made by approximation of the palatal process.
placement of bones in early infancy is often great, yet they recover normal form. In one so young there is scarcely any impression made upon the vital parts. The conditions are favorable and the operation advisable.
14. Showed an oral speculum, used for the purpose of holding the tongue down, illuminating the mouth and giving access to it. Dr. Brophy seldom uses it himself in operations on the hard palate, but upon the soft it is necessary. He contents himself with closing the hard palate, and lifts the soft palate over in
another operation, to be made two or three or many months later. He does not see fit to operate on both the hard and soft palate at the same time; we leave the lip operation for the last. Why should the surgeon close, to some cxtent, the opeaiag through which he must make the operation upon the palate? Why should the space be shut off first, and after the cloor is half closed, so to speak, commence at the inside operation? When yon introduce the posterior needle you need all the room you can get to carry it through, so that the operation on the palate should be first done, and then the operation on the lip may be made, because you have easy access to it. The oral specula can be made of different sizes.
15. Showed needles, made strong because we put them through the bone itself and carried out at the opposite side. Just the right form and shape so as to be able to guide them, and watch that they come out just right.


Flic. 14.
16. Casts projected upon the screen which will be rather convincing to any one who may consider the subject as to whether the operations should be made in early infancy for closure of the palate. Shows cast of the mouth of a boy twelve years old, in whom the teeth protruded. All these teeth lap over the lower ones The lower teeth are not visible in one cast. The superior teeth lap over the inferior ones. The anterior ones are not visible. Succeeded in bringing the teeth so that they occlude with the lower teeth.
17. Shows posterior view of same condition; they lap outside. Had this child been operated on while young his teeth would have occluded quite properly.

I8. There is a powerful argument in these two pictures. Proves that this does not lead to deformity in forcing the bones together; from the mouth of a boy five years old. Note the difference in the size of these two squares. Note the difference in the width, and measure the distance between the hemispheres of
the palate. We find that the difference of the width of these two squares is just the difference in the width of the borders of the palate. This is very common. This means that while Dr. Brophy had the making of this operation for years he was willing to admit that there would be a very greatly contracted arch. To


Fic. 15.
his surprise he found the teeth occluded very naturally witi the lower ones. We find that some of the germs of the teeth are lost -some may pop out during the operation. The permanent teeth will almost invariably come in right. When the teeth come in they seem alright except that they are sometimes flattened somewhat.
19. Photograph of a child six weeks old, which had a con-
genital cleft palate, and the outline of it we see in the picture quite well. There is also unilateral hare-lip on the right side. Dr: Brophy's observation has been that in about 80 per cent. of children who have hare-lip it appears on the left side. In this case


Fig. 18.
it is on the right side, and there is an enormous fissure here in the palate.
20. Showed the condition of the child's mouth a week after the operation. Showed lead plates in place, and the palate united. The cleft is perfectly closed all the way back. The cleft was as large as ever Dr. Brophy had to deal with.
21. Shows casts of mouth of same child. In this case used four silver sutures instead of two.
22. Patient pictured here represented enormous cleft of palate ; vomer separated from both sides; projecting intermaxillary bones far beyond the end of the nose. The first step was to close the hard palate; next ster: was to operate on the projecting intermaxillary boncs and bring them into place. It wouid have been a mistake to cut them away because we wanted those to fill up the space in front. The intermaxillary bones were carried back


Fic. 19.
23. Showing the prominent intermaxillary bones and V-shaped picce of bone taken out and then sutures of wire put in and the intermaxillary bones forced back and united. We want the teeth that are in the intermaxillary bones.
24. Shows cast of the mouth of a child about thirteen years of age. Dr. Brophy operated on this child when she was about ten days old. There was irregularity of the teeth throughout, which was due to the tension of the upper lip; the child really had no upper lip. The tension was great and literally forced the teeth into the position they occupy. The molars of this child have just developed. The child has now a good palate and articulation is perfect, and she is quite an accomplished vocalis: for one so young.
25. This little girl was at the mecting of the American Dental Association at Niagara Falls in 1898, and when she was placed before the audience a gentleman rose and asked her to pronounce a word. "T.ittle girl, will you please say 'Kingsley? " "K" and "G" are difficult letters for persons with cleft palates to pronounce. The little girl clearly and distinctly, the first time in her life so far as I know, and ia a voice heard all over the room, said "Kingslcy." T!at was the answer to Dr. Kingsley's criticism of my method.
26. A picture of Dr . Garrison, of Philadelphia, upon whom Dr. Brophy pronounced an eulogy.


Fic. 20.
The discussion was opened by Prof. A. Primrose, of Toronto University, who highly complimented Dr. Brophy upon his lecture, stating that he must have had an experience that was almost unique in the treatment of cleft palates. Dr. Primrose thought there was nothing to be criticised, and all that was left was to compare the results of Dr. Brophy with those of Wolff of Berlin, who had performed 290 of these operations. Wolff, out of 296 cases, had a mortality of 10.6 per cent., while Dr. Brophy has a mortality almost nil-a mortality which amounts to something less than one-half of one per cent. That, thought Dr. Primrose, speaks for itself. Dr. Wolff's cases refer to and include all ages, and are not referable
simply to very young children. The mortality is reduced in proportion to the age of the infant, practically; and in operating in young infants the mortality is very much less than in operating on older children and in adults. Dr. Brophy's method in connection with operating on the soft palate, in avoiding the laceration of tissues, must be a great step in advance. Dr. Primrose then gave a clear demonstration on the blackboard of the anatomical conditions present in these deformities, confining his remarks especially to the intermaxillary bones.

Dr. McLaughlin followed Professor Primrose in the discussion. He congratulated the society at the opportunity of having this matter put before the profession of dentistry so prominently


Fig. 2 I.
and so clearly. He thought that it was a subject with which the profession in Ontario was very little acquainted, particularly the operation in early infancy. He had thought up to the present that the field open to the surgeon was very limited; that the field was confined to congenital cleft palate in the adult, and that the operation might succeed from a surgical standpoint, but not from a practical standpoint. The great result aimed at was not gained, i.e., correct articulation in the patient; but now that has been dispelled by Dr. Brophy.

Mr. I. H. Cameron thanked the society for the privilege of being present, and stated he was not unfamiliar with the work of Dr. Brophy. He thought that Dr. Brophy's friends were wrong
in telling him there was no precedent for his operation. He considered that Hainsby's truss had been invented for the purpose,

$\therefore$

A. Protruding intermaxillary bones containing germs of the temporary central incisors. 13. V-shaped incision in the vomer, indicated by dotted lines.
and it was found that this truss brought the bnnes together and approximated the edges of the cleft. He thought there were lots
of precedents for the use of pressure in the approximation of the edges of the palate. There were many interesting points Mr. Cameron would have liked to have alluded to in commendation. He heartily agreed with what Dr. Brophy had said in his eulogium of Dr. Garrison, of Philadelphia.

Dr. Sparrow asked Dr. Brophy why he used lead plates in preference to plates of other metals.

Dr. George A. Peters considered that they had had an admirable and useful address from Dr. Brophy, which left very little


Fig. 25.
to say in criticism, and very much to say in commendation of it. He was very glad indeed to find that he does not remove that intermaxillary bone. Dr. Peters had operated on a great many cases in which it projected out in a very tempting way. In his experience the removal of a V -shaped piece has not been, in his hands, sufficient, but he has taken out a quadrilateral piece. Dr. Peters stated he would like to know a little more about the treatment of the vomer-does Dr. Brophy freshen the edge of the
vomer when that is free? Dr. Peters also referred to the operation for hare-lip.

Dr. Brophy in reply.-Referring to the statistics of Dr. Primrose, Dr. Brophy stated that he had mentioned only those operations in young children under six months. The number of persons older than that, including the young children upon whom he had operated up to that day, was six hundred and five. The question of speech is a very intricate one. While Professor Kingsley, of New York, has dealt with it from all standpoints, he could not state why in certain cases articulation would be defective, and often in persons who had good palates; he could not say why patients with defective palates sometimes had good articulation. He has seen persons with clefts of the character first spoken about who spoke fairly well, and others having clefts whose articulation was so indistinct that one could scarcely recognize what they were trying to say. Largely speaking, it is a matter of education. The reason why Dr. Brophy uses lead plates is because they are most easily adapted to the parts, and then lead is tolerated so well by the tissues. The lead put in contact with the tissues may be so nicely and easily adapted to the parts. It just embeds itself a little way along the entire length, and consequently the sutures cannot cut out. That is one of the values of lead. Silver and gold and platinum would be too stiff. The lead is easily adapted so as not to cut into the tissues. Dr. Brophy stated that he enjoyed the remarks of Mr . Cameron very much. This idea of transfixing the bones and passing sutures through the bones first suggested itself to Dr. Brophy when attending one of Professor Sayer's clinics in New York, where a little child a few weeks old, with congenital cleft palate and double hare-lip was operated upon. It then occurred to Ir Brophy that all that was wanted to make the operation a successful and perfect one was something to keep the bones together. Twelve years afterwards he perfected that idea. Referring to Dr. Peters remarks he said that he would accomplish very good results if he got well up into the nose.

The meeting adjourned to the Sick Children's Hospital, where Dr. Brophy performed his operation on a child, a patient of Dr. N. A. Powell.


# Reports of Societies 

# TORONTC CLINICAL SOGIETY. 

Stated meeting, March 6th, 1901.
Dr. George A. Peters, the Vice-President, in the chair.
Visitors present: Dr. Clarence Starr, and Dr. Kyerson, of the Sick Children's Hospital.

## CASE OF CONVULSIVE TIC-WITH PATIENT.

Dr. R. D. Rudolf presented the patient and read notes of the case. This condition of tic really means a jerk, or twitch, or spasm. He referred to an exceedingly good article on the subject in Clifford Allbutt's "System of Medicine," by Dr. Russell, who divides it into four different classes. Dr. Rudolf thought that the first class, that of simple tic, which is sometimes called habit spasm, was very badly named, because it was not always due to habit. The other part of the name is also wrong-it is not convulsive; it is simple, because the patient utters no ejaculations. J. P., aged fifty-seven years, who came complaining of twitching of the muscles of the face and neck, and the duration of whose illness was then about fifteen months. He had been married seven years; no children. There was no history of spasms of any kind in any of the members of his family. His previous history showed that he had always been strong, and there was no history of venereal disease at all. Outside of his present trouble he was strong and healthy. The present attacks began six months ago-began by a great deal of twitching of both eyes, and much worse when walking about. When he was sitting still he was not troubled with it at all. Dr. Rudolf saw him first in March of last year; that was six months after the commencement of his illness. He suffered then from spasm of the eyelids, coming on at irregular intervals. The patient occasionally assumed a condition of risus sardonicus. He was decidedly worse in December. It involved the facial muscles as well as the orbicularis palpebrarum. This almost makes him blind. There is nothing abnormai in any of the muscles of the neck. When sitting quietly he is preity steady. The twitchings are rapid-about one hundred and twenty to the minute. When he tries to open the eyes, he momentarily succeeds, but spasm in face and neck sets in. His forehead wrinkles up and relaxes, and he assumes the risus sardonicus condition. The strands of the platysma stand out like cords. The sterno-mastoid is also involved. The head is occasionally drawn forward and to the right side. If the eyelids
are forcibly opened, the condition is found to involve the external muscles of the eyes, so that the eyes are rolled about. The tongue does not seem to be affected, and speech is unafferted. When he stands the spasms are worse, and so close his eyes that he is partially blind. His head rotates from side to side, and he endeavors to hold it with both hands. Saliva increases in the mouth, and a peculiar suffering is induced. These are very constant in the disease. The eyes were examined by Dr. Reeve, who found them practically normal beyond a little presbyopia. There is a good deal of watering of the eyes. Romberg's symptom is absent. The knee jerks are absolutely gone, when tried a few weeks ago. There is no headache, but occasionally pain about the muscles of the neck when the spasms are on. There are no abnormal sensations anywhere. The spasms are all gone whein he is asleep. He is almost if not quite as bad when sitting in the dark as when sitting in the light. He can sit or lie in bed with his eyes closed and be pretty free from the spasms, but if he opens them the spasms begin at once. The act of opening them brings on the spasmsin the light. When the spasms are very bad he puts his hands to his head and neck, and by pressure he slightly controls them. It is quite evident that this case belongs to the first class of Dr. Russell, viz., simple tic. He has not any of the verbal ejaculations except under sufficient provocation. It is certainly not cyclical. As regards the cause of this condition, there have been numerous causes mentioned. It is frequently habit; the condition commences as one of habit-blepharospasm from conjunctivitis, and lasting long years after the irritation has gone. Habit spasm is a bad name, because it is not present in all cases. It is not hereditary in this case. The age : most commonly it commences in youth, but occasionally later in life, as in this man, who was fifty-five or fifty-seven when it commenced. Irritation from sume scar is another cause, but there is no such cause to be found in this case. The most common cause, or associated condition, seems to be some error in accommodation. Dr. Sinclair found error of accommodation in forty-one out of forty-nine cases-quoted by Dr. Russell. There is very little wrong with the eyes in this case. The case is a typical one. Dr. Osier mentions that a dozen of these cases may be found attending any clinic. Dr. Rudolf does not think them so common. He came across a very slight case this winter. In the treatment he has tried various remedies. Bromides had no effect at all. Nitro-glycerine absolutely had no effect here. At present the patient is taking liquor arsenicalisfive minims three times a day. Dr. Rudolf thinks he is slightly better than he was at first. The patient was examined by the Fellows present, and it was found that the man had a large right scrotal hernia.

Dr. Oldright asked whether the zinc salts were of any worth in these cases.

Dr. Primrose referred to scars as a cause of tic, and asked whether it was common to have a unilateral condition in these cases, or common to have both sides involved, or one side only.

Dr. Peters asked if Dr. Rudolf had discovered any reflex exciting cause excepting the hernia, which he has had a great many years; for instance, anything in the Schneiderian membrane; and if stuttering has any relation to this disease. He also referred to the case of a bandsman in one of the city bands, who stutters very badly, who jerks his head to the side frequently and utters ejaculations. Dr. Yeters has noticed quite recently that some one has been operating on these cases by cutting the seventh nerve and transplanting the spinal accessory into its distal end. He claims in that way to have got rid of the spasm, without having complete paralysis. This operator had done it in two or three cases with beneficial results. Possibly, taking out a section of the orbicularis muscle might relieve the intensity of the eye spasm.

Dr. Rudolf, in reply, thought that stuttering would come under the hearing of the co-ordinated form of tic, not this unco-ordinated form. He has seen cases of that kind-inspiratory form of stuttering. Cutting the facial nerve and joining it to the spinal accessory might do in a unilateral case, but he does not see what good it could do in this case, where the condition is generalized-where it is so general. Dividing of the orbicularis muscle on both sides might possibly do some good ; but now the spasms are very generalized. The prognosis at the present is very poor indeed. Regarding Dr. Primrose's question, if due to a scar, would it be unilateral-he does not think so always. Dr. Reeve strongly suspected there would be a scar somewhere. Dr. Rudolf has not tried the zinc salts. The prognosis is exceedingly poor, and Dr. Rudolf stated he was glad of the suggestion of operation on the orbicularis palpebrarum. The condition now practically makes the patient blind. The man has had right inguinal complete hernia for forty years.

## TENDON TRANSPLANTING IN PARALYTIC DEFORMITIES.

Dr. Clarence L. Starr, by invitation, presented this paper, with the histories of four cases. The treatment of paralytic deformities has been, until recently, by means of mechanical support, and where operative treatment had been added it was in long-standing deformities, and in these a simple operation has been done and the necessary mechanical support applied afterwards to prevent relapse. The outlook for that has not been bright. Within the past few years other attempts have been made to prevent or correct deformity. In 1881, transplanting of the perineal tendon into the tendoAchillis was first performed. One cannot claim that the operation
will cure or is applicable in the large number of cases of deformities. Some are, however, completely cured. Operation is clearly indicated where a group of muscles are left unimpaired while others are paralyzed. Better results may be looked for here than elsewhere. Dr. Starr then reported the following four cases in detail:

CASE i.-A boy, five years of age, who had acute infantile spinal paralysis with complete paralysis of the right limb. The perinei muscles remained inactive. The patient walked on the outer border of the foot entirely. The tendon of the perineus longus was isolated, a second incision made above the ankle joint, and the tendon of the tibialis anticus exposed. These tendons were united. The foot is now perfectly flat.

CASE 2.-A young girl, fourteen years of age. Perfect valgus was present in this case-equino-valgus-the calf muscles being paralyzed as well. It was desirable to get a firm base of support in the right leg. An oblique incision was made from above the outer malleolus downwards and inwards so as to expose the perinei tendons and the tendo-Achillis. The brevis was divided and carried underneath the tendo-Achillis and attached to a slip of the flexor longus hallucis. The perineus longus was then divided and attached in the same way to the tendo-Achillis. The wound was closed and splints applied. Passive motion was commenced in three weeks, and in six weeks the patient was able to bear her weight upon it, and she is now able to walk.

CASE 3.-A young lad, aged eighteen years, with marked valgus deformity resulting from infantile paralysis. He walked with a stiff and awkward gait. An oblique incision was made over the extensor tendons. The extensor longus digitorum was isolated. The patient was allowed to walk in six weeks, and his gait was very much improved.

CASE 4.-This patient, a boy, aged five years, was presented to the Fellows. He had had an acute attack of paralysis in July, 1899, which involved both lower extremities. The right gradually improved, and is now apparently totally recovered ; the left only partially deformed; showed the regular typical club-feet. In January, i90I, the perinei and extensor muscles were permanently paralyzed, giving no response to the Faradic current. The boy walked altogether on the upper surface and dorsum of the foot; walked distinctly on the outer side, the plantar surface being turned inward and backward towards the opposite foot. There was marked toe-drop, except in the great toe. The boy was operated upon on January 23rd, when a curved incision was made exposing both perinei and the tendo-Achillis. The wound healed by primary union ; supports removed only a few days before his being presented to the Society. There is noted marked improvement in the position and stability of the foot. The plantar surface comes
in contact with the floor at eyery step. A great cical may be done for this otherwise helpiess class of deformities; and it is essential that primary healing be secured or the operation will prove useless latterly. Kangaroo tendon should be used in these operations; silk is likely to ci: me out later on. Motion should not be allowed until four or five weeks, as tendons unite very slowly. In this case the extensor communis digitoram was attached to the tibialis anticus.

Dr. E. E. King complimented Dr. Starr on his exceedingly good results in these caser, especially in the one presented.

Dr. George A. Bingham said that he recalled the latter case prior to operation, and thought that Dr. Starr was to be congratulated upon the result of the case, because the deformity was decidedly marked; and certainly there has been done great things for this boy. He felt satisfied that the child would continue to improve if judiciously handled.

Dr. Primrose also congratulated Dr. Starr on this case, and he recalled several other cases of Dr. Starr in which the results had bean equally good-in the Children's Hospital. The operation is such a simple one that it was a wonder to him that it had not been done more extensively.

Drs. Pepler and Peters discussed the cases briefly.
Dr. Starr, in reply, thanked the Fellows cordially for the kind expressions that were made with regard to these cases. He had been interested in this subject for some time, and had put quite a lot of study on it. It is absolutely necessary, if you use a mechanical support of any kind, to replace it by a larger one, so that the patients are thoroughly disgusted when they arrive at adult life. Dr. Primrose has suggested the possibility of nerve grafting, but Dr. Starr did not remember ever hearing of any case where that had been attempted. He had heard it discussed in the American Orthopedic Association at one time.

## UNUSUAL DILATATION OF BLADDER-CANCER OF STOMACH.

Dr. William Britton presented these pathological specimens and described the conditions present in each patient. The first occurred in a gentleman, 75 years of age, who had always lived a careful life. He had come to Dr. Britton last winter complaining of a difficulty in voiding his urine. He had to use more force than was natural. Dr. Britton examined him and found what appeared to be a tremendous cyst of some character extending up as far as the lower margin of the ribs on the left side, the greater part of the -tumor appearing to be to the left of the median line. The doctor used the catheter the following day and drew off seventy or eighty ounces of urine. The character of the urine was the same as was found subsequently at post-mortem. After a few days he was seized with coma and died in this comatose condition after seventy-two
hours. A post-mortem examination was made by Dr. H. B. Anderson. Found prostate very much enlarged ; ureters much dilated; kidneys about normal in size, but evidence of hydro-nephrosis. Bladder was full with about seventy or eighty ounces. The urine was limpid, almost as clear as water. Dr. Britton did not know the exact quantity of urine he was voiding prior to his coming to see him. The sp. gr. was 1,008 . Bladder was a great deal hypertrophied. The walls were thickened, and there were very small extravasations beneath the mucous membrane.

The case of cancer of the stomach occurred in a man who in ordinary health weighed 196 pounds, a machinist by occupation. He had always lived the life of an Englishman, that is, he ate as much as he wanted to. He was very robust, and Dr. Britton had known him for ten years. Last fall he began to become emaciated. He was reduced from his former weight of 196 pounds to 117 pounds. That would seem to be almost beyond belief. He had been suffering about a year and one-half with the ordinary symptoms of cancer, except that he suffered no pain from first to last. In the first instance, one and one-half years betore he was seen by Dr. Britton, he had discomfort in the stomach, which would continue for two or three days when he would vomit large quantities of undigested food, and would be relieved by drinking large quantities of water. The intervals of relief became shorter and shorter. Dr. Britton was not able to find any tumor and nothing but positive evidence of closure of pylorus. He was fed per rectum for two weeks, during which time he gained seven pounds in weight. He was seen by Mr. Cameron, who performed gastro-duodenostomy. He died a short time afterwards. On opening the stomach it was found to be very much enlarged, the walls being very much thick. ened. At the pyloric extremity there was a soft cancer attached to the walls all arcund, but there was sufficient opening so that the doctor could pass his finger easily through the pylorus. When food entered the stomach, the cancer was pressed down and acted as a sort of ball valve. There was no exit from the stomach to the intestines. Before the operation, Dr. Anderson made an examination of the contents of the stomach; and the details of the report pointed towards the existence of cancer. HCl was present. No lymphatic glands were affected at all. The cancer was a very small one, and it was extraordinary that it should have caused death by starvation. The lungs were in a perfectly normal condition, and the other organs of the body as well; no rnetastasis.

Dr. Fotheringham asked if a microscopical examination had been made as to the exact character of the new growth.

Dr. Rudolf asked the composition of the nutrient enemata which produced the large gain in weight.

Dr. Peters thought it a remarkable feature of the case, the pronounced loss in weight with so small a growth; and the fact that
the cancer had evidently produced death in the end was one which would appear to have been amenable to treatment by pylorectomy, there being no enlargement of glands and no metastasis in the liver. He considered it a rare condition to find cancer as old as this without these conditions being present. Most cases when discovered are so far advanced that you cannot remove the pyloric end of the stomach on account of metastasis, etc. Symptoms of cancer of the pylorus are very slight in character for a long time, and by the time a positive diagnosis has been made it has gone past the reach of the surgeon. Gastro-enterostomy was the proper operation had the patient been strong enough to stand it.

Dr. Primrose began the discussion on the bladder case. A question which has occurred to him in connection with a case recently under his care-whether it is wise to interfere at all with a greatly distended bladder, or whether it is not wiser to open the abdomen and establish drainage. He further referred to several cases in his own practice.

Dr. Silverthorn asked whether Dr. Britton had any difficulty in passing a catheter.

Di: Oldright mentioned a case where a man had not passed urine for thirty-six hours; he drew off sixty ounces of urine. What does Dr. Britton think was the cause of death in his case?

Dr. Britton stated he did not look upon it as a case of sepsis.
Dr. Peters had stated there must be something else than that.
Dr. Bruce, Dr. King and Dr. Silverthorn continued the discussion.

Dr. Britton, in reply, stated that a microscopic examination had been made of the stomach, and the report was cancer. The enemata consisted of thoroughly peptonized milk. As to the bladder case, he had not been able to assign the cause.

A motion was unanimously adopted in regard to the Medical Alliance of America, which has already been published,

George Elliott,<br>Recording Secretary.

# DOMINION MEDICAL MONTHLY 

AND ONTARIO MEDICAL JOURNAT,


## THE ONTARIO MEDICAL ASSOCIATION MEETING.

The dates of the annual meeting of the Ontario Mcdica! Association have now been definitely fixed, and they are the 19th and 20th of June, Wednesday and Thursday. The papers are now coming in daily and everything points to a most successful meeting. Arrangements will be in charge of Dr. Bruce L. Riordan, of this city, and Dr. Riordan's well-known executive ability in this direction ensures the complete success of that part of the programme. Dr. H. T. Machell is to have charge of the papers and business, so the literary part of the meeting will be in good hands. We understand that arrangements are being made to have men from Hamilton, Ottawa, Kingston, London and other places take prominent parts in the discussions. This is on a line repeatedly advocated in the Dominion Medical Monthly, that men from our own cities should more often be given these places of prominence than they have been given in the past, both in the Ontario and Canadian ivedical Association meetings. We have pointed out before that this would contribute more to the real value of the meeting, in point of numerical strength, which is not the only thing, of course, than where eminent men were brought in from beyond the borders. Not but what Canadians are always glad to welcome these gentlemen, but rather that our own eminent men in their limited spheres should be given a chance, at least at their own national societies, of showing what they are made of. The method of dividing the Ontario Medical Society into sections has not found favor, either, in many eyes. The Society is largely composed of general practitioners; and those who come in from outside cities and towns are anxious to hear everything that is going on, which they cannot do when the meeting is divided into sections. The
committec having this in charge should take a vote on the matter at the next meeting to see where the Society stands on this question. Then we have before drawn attention to the time when the business part of the meating is held-when all the outsiders are gone home--and this important, very important, part of the meeting is left entirely to Toronto men. Important questions affecting the profession generally should not be left to be discussed by any local section; and there are matters of medical politics of far greater moment than the reading of papers and reporting of interesting cases. We trust that an effort will be made to improve this section of the meeting. and we respectfully invite the attention of the Chairman the Committec on Papers and Business to this matter. The protession in Ontario should be a unit in advancing its material interests.

## VENEREAL DISEASES.

Medical health officers, as well as medical men in general, are giving us abundance of literature on the prevention of smallpor plague, tuberculosis, e.tc., but we hear very little about how to control the spread of syphilis and gonorrhea. This indifference is probably due to the great difficulty of dealing with the question, and to the public, sentiment against legalizing prostitution in any form. It cannot be due to the less importance of the subject, as it is a well-known fact that these two diseases are, with the exception of tuberculosis, amongst the most dangerous scourges with which the public have to contend. Gonorrhea is no longer considered a local disease. The gonococcus has been demonstrated in the tendons, synovical membranes, peritoneum, pleura, endocardium blood, etc. Gynecologists tell us that the majority of deaths from diseases of the pelvic viscera result from gonorrheal infection. Stricture, pyelitis, pyelo-nephritis, gonorrheal rheumatism, gonor heal conjunctivitis, are all serious complications, which may lead to deformities and even a fatal result. We think, therefore, that it is the duty of the physician never to make light of this venereal disease, but to inform the patient concerning its possible complications. By this means the laity would become educated to the seriousness of gonorrhea and would exercise greater selfrestraint or greater care in order that they may not contract the disease; moreover, if a person, knowing the attendant dangers, should become infected by the gonococcus, he or she should immediately consult a physician and not fall into the hands of persons who know nothing about its treatment.

As regards syphilis, the laity are better informed concerning its dangers. They always look upon "the pox" as a serious disease, but not more seriously than it deserves. Any organ in the body
may be attacieed, but affections of the blood vessels and central nervous system are usually the most dangerous to life. We believe that it is the duty of the physician never to minimize the dangers of syphilis and to inform the patient how the disease is contracted. A patient should know that a mucous patch in the mouth or vagina may be just as virulent as the primary iesion, and that it is very difficult to determine the time which must elapse before he or she is free from the danger of infecting any other person.

The mechod of regulation of public prostitution which has been adopted in France, Germany, cte., has been found in many waiss unsatisfactory; but it has produced the result that greater prophylactic measures in this disease are shown, not only by the boards of health, but also by the laity in general. The fact that the frequency of syphilis has not dimished in those countries is due to the increase of clandestine prostitution. Puilic sanctioning of prostitution will probably never gain a focthold in this country. We therefore believe that it is our duty to educate the peopic concerning the attendant dangers of venereal diseases.

## POST-GRADUATE COURSE IN TORONTO.

Our attention has been frequently called of late to the good opportunity which the medical profession in Toronto has to establish a post-graduate school. The Council of the College of Physicians and Surgeons of Ontario compel undergraduates to pursje five years of instruction before they are allowed to present themselves for the final examination. At the present time the students spend their first four years at the various medical schools and colleges, and then, if successful, receive their degrees. No provision is made for further instruction by these teaching institutions. This assuredly must be a mistake. If the Ontario Medical Council consider that it is necessary for a student to have five years of instruction, then we think that the colleges should provide the same for those who wish to avail thernselves of it. A postgraduate course started for the fifth-year men would soon develop into a course for older practitioners. It would alsc tend to raise the standard of medical education in the Province. Tor.onto is favorably situated for such a school. The medical faculties are large and could readily manage the work.

## MEDICAL FOLK LORE IN INDIA.

The illustration upon page 106 of the March issue of the Dominion Medrcal Monthly is a reduced fac-simile of a charm, the history of which is as follows: One day Dr. R. D. Rudolf was urgently called to see an English lady who had been in
convulsions for many hours. Upon arriving at the distant bungalow where she lived he found that she was dying. Her husband, driven to desperation by her serious condition, had yielded to the entreaties of his servants and allowed them to call in a medicine-woman from a neighboring village. The woman came, looked at the patient, went away and presently returned with this charm written and drawn on a coarse piece of brown paper. Her directions were that it was to be placed under the pillow of the sufferer with the object of scaring out the turbulent spirits which were convulsing her.

The translation on the next page was made by an educated native. The charm contains images, groupings of mystic numbers, a prayer and the words Ram and Sitaran repeated many times and thus, like many prescriptions, has several ingredients.

## News Items.

Dr. Crockett has been elected Mayor of Fredericton, N.B.
Barrie, Ont., is to have a new hospital. The town has voted \$12,000 for the purpose.

The Mount Royal Cemetery Crematory Bill has passed the Quebec Legislature by a majority of one.

The Montreal Western Hospital is crippled financially. There is a deficit of $\$ 9,000$, and the treasurer has resigned.

A young lady clerk of Winnipeg recently died under chloroform when about to be operated upon for a nasal growth.

Dr. Leonard Vaux, of Ottawa, will return to South Africa, having received a commission in the Baden-Powell police force.

A plague of hypnotism is said to be epidemic in Stratford, Ont., where pupils at the schools are playing with this dangerous pastime.

A great number of the physicians of Montreal are asking that the private wards of the General Hospital be thrown open to practitioners generally.

The Medico-Chirurgical Society of Montreal has decided not to discuss the question of admitting all practitioners to the private wards of the General Hospital.

Quebec has the highest birth-rate of any country in the world excepting Germany. In 1898 the rate was 35.70 ; in $1899,33.46$, which represented a decrease of 3,585 .

The Ontario Board of Health has issued a diagnostic circular on smallpox to doctors, medical health officers and local boards of health in the province.

The Bill which was before the Ontario Legislature re option in vaccination has been withdrawn. Its promoters should crawl into a hole and pull the hole in after them.

Dr. Walter Wilkins, one of the resident staff of the Montreal General Hospital has left for British Columbia to accept an appointment as surgeon to the Cariboo mines.

Public demonstrations in the sciences has been annually inaugurated at Toronto University. The first evening, which was held about the middle of March, was a very successful one.

FOR hospital maintenance in 1900 Toronto paid out $\$ 30,829$, as against $\$ 37,238.05$ in 1899: In addition, the charitable grants amounted to $\$ 43,895$ in 1900; of this sum the Hospital for Sick. Children got $\$ 7,500$.

A medical student of Quebec, who claims to have been a graduate from Bishop's in April, I8.99, is seeking to compel the College of Physicians and Surgeons to grant him a license to practise in that province.

On the 26th of March a new science building was opened in connection with the University of New Brunswick. Professor Loudon, of Toronto, was present and delivered an address. New Brunswick voted $\$ 10,000$ for the building.

Hamilton, Ont., is to have a new out-patient building for their city hospital ; $\$ 5,000$ has been donated for the purpose by Mr. John Billings, in commemoration of his late wife, who ever took an acti.e interest in the affairs of that institution.

Trinity Medical Cor.lege has rejected amalgamation with the medical faculty of Toronto University on the proposed lines, which were understood to be that the faculties be united for two years, when recrganization should take place, and a number dropped.

Of Canadian cities, Quebec would appear to be the most free from tuberculosis, and Ottawa to be the most seriously affected. Quebec's death-rate from tuberculosis is 1.99 per 1,000 of the population; Ottawa's is 3.12; Montreal's, 2.87 ; Kingston's, 2.17; Toronto's, 2.41, and London's, 2.67. These compare favorably with Paris and New York, which are 4.90 and 3.60 respectively.

A BilL prohibiting the sale of cigarettes to minors is at present before the Prince Edward Island Legislature.

The asylum population of the Province of Quebec is put down at 2,981, and the cost of maintenance $\$ 314,157.4$. The percentage of cures for 1899 was less than for I 9 g .

Ninety per cent. of the population reported deaths for February in Ontario, which amounted to 2,484 as against 1,962 for the corresponding month of last year. Tuberculosis claimed 238 .

Toronto Contagious Diseases report for February and March is as follows: Diphtheria, 77; scarlet fever, 57; typhoid fever, 6. For February, diphtheria, 91 ; scarlet fever, 37 ; typhoid fever, 2.

The Militia Department has made the announcement that there is a Bill before the Imperial House of Commons which will provide for Canadians of the medical profession entering the Imperial naval, civil and military services.

Sir William Macdonald, who has already given McGill $\$ 2,500,000$, has again contributed $\$ 150,000$ to the funds of the University. $\$ 75,000$ will go to endow a chair to chemistry, and $\$ 12,500$ will be added to the endowment of the chair of physics.

Dr. J. George Adami, Professor of Pathology at McGill University, has been appointed vice-president of the section of pathology and bacteriology of the International Congress on Tuberculosis, to be held in London in July, under the patronage of His Majesty the King.

Since September last Montreal has had, in a period of six months, $\mathrm{I}, \mathrm{O} 6^{\prime}$ cases of scarlet fever, with 222 deaths. In 1894 there was a similar epidemic, when the total cases registered I,915. Up to the first of February the number treated in the Civic Hospital was 159, of whom 46 died.

A large new wing is to be added to the medical building of McGill University during the coming summer. It will be four stories in height, and will contain a large number of lecture rooms, theatres, museums and laboratories. The total cost will be defrayed by Lady Strathcona and the Hon. Mrs. Howard.

Dr. Lapthorn Smith, who was recently appointed Professor of Diseases of Women in the University of Vermont, returned to Montreal on the 30th ult. to resume practice. While at Burlington he delivered his first annual course of lectures at the Medical School, his surgical clinics being given every morning at the Mary Fletcher Hospital.

A new Manual of Laboratory Physics has just been issued for the McGill science students by Professor H. M. Tory, M.A., and Mr. F. H. Pitcher, M.Sc.

A woman recently died at Scott's Bay, King's County, Nova Scotia, ten days after confinement, at which no physician was present. The husband was a disciple of Dowie, of Chicago, and the Chicago "prayer office" was called into requisition by wire on two or three occasions, but without avail.

An Act is before the British Columbia Legislature to incorporate the new Royal Columbia Hospital, and in connection therewith a deputation recently waited on the City Council asking that the name be changed to the Westminster General Hospital, and that no resident medical superintendent be appointed.

Nurse Daisy Goffrey, of the Civic Hospital, Montreal, recently contracted measles in that institution, of which she died, and now the dilapidated and unhygienic condition of the hospital is held accountable for her death. Montreal should do better in this line. Her civic barracks should not be dignified with the name of hospital-shack would be better.

THE baking powder men recent/s awaited on the Central Government to protest against the bulletins issued by the Department of Inland Revenue in regard to the employment of alum in baking powders. They were accompanied by Dr. Peter T. Austin, of New York, while the Government was represented by. Mr. Thomas MacFarlane and Mr. A. McGill.

At the annual meeting of the local branch of the Victorian Order of Nurses, held a short time ago in Montreal, the report submitted showed 529 cases were treated during the past year, and that $6,75 \mathrm{I}$ visits had been made and 150 night calls. The available receipts amounted to $\$ 10,463.58$, and the expenditure $\$ 5,126.54$. Dr. J. G. Adami was re-elected Secretary, and Dr. Craik, Vice-President.

Applicants for pensions in consequence of their services in South Africa will have their claims examined by the following medical boards, composed of medical officers of the Canadian Militia: In Montreal-Surgeon-Major J. G. Roy, Surgeon-Major C. W. Wilson, and J. M. Elder, M.D., and Regt. C. A. In Toronto -Major W. Nattress, Surgeon-Major J. E. Elliott, and SurgeonMajor J. T. Fotheringham. In Kingston-Major H. R. Duff, Surgeon-Major R. W. Garrett, and Surgeon-Major H. R. Abbott. In London and West-Major C. W. Pelton, Surgeon-Major J. N. Piper, and Surgeon-Captain A. N. Hayes, of Sarnia.

The annual meeting of the Diet Dispensary, Montreal, was held recently; 6,000 visits were made during the year by the dispensary nurses. Dr. D. J. Evans was present and expressed the gratitude of Montreal's physicians at the work of the institution.

Dr. Kirpen, of St. Thomas, is to be congratulated on his legacy from a former patient; $\$ 7 \$, 000$ is a snug little sum to be awarded for an act of kindness. The Toronto Star arises to remark that the young doctors of the city will now be forever haunting the poorer districts of the city in the hopes of a similar windfall; such bald ignorance of a doctor's work amongst the poor of this city is stupendous.

Dr. ReID, medical missionary among the Doukhobors, recently addressed a meeting in Toronto. According to him there are 8,000 of these in the North-West and 30,000 Galicians. A cottage hospital has been erected at Sifton, and another will likely soon be located at Ethelbert, as a Montreal lady has offered to build a second one; it is likely that another medical man will have to be appointed to the field.

An investigation by the Charity Organization of Montreal in comnection with the proposal to charge five cents fer bottle for medicine to out-door patients at the General Hospital shows that it is usually better not to give drugs away. Out of nine large hospitals in New York City all but one charge for this medicine from ten to twenty cents, which net some of them a handsome profit for their outdoor departments.

Every householder in the Province of Quebec, in whose household a death from tuberculosis of the lungs occurs, is now required by law to notify the secretary of the local Board of Health within forty-eight hours of such occurrence. This law came into effect on the 7 th of June, 1900 . Immediately upon such rotification being given the municipality must cause the disinfection of the apartments occupied by the deceased subject.

A Very peculiar quarantine is said to be now existing in the Canadian North-West Territories. In and around the districts of Calgary and Edmonton there is now, and has been for some time, an epidemic which some claim to be mild small-pox, whilst others say it is an epidemic of German measles or chicken-pox. There have been over 1,000 cases, but no deaths recorded. The health officers appointed by the Territorial Government stand at the ticket boxes as passengers purchase their tickets and give each traveller a certificate, for which they charge $\$ \mathrm{I} .00$ and sometimes $\$ 2.00$. This permits each purchaser to come and go as he pleases, although he is considered to be in quarantine all the time.

Dr. Manchester, a graduate of McGill University, who was at one time assistant to Dr. Burgess at the Verdun Hospital for Insane, has been appointed superintendent of the Asylum for the Insane at New Wertminster, B.C. He has been assistant there for the past two or three years.

The National Sanatorium Association recently waited on the Ontario Government asking for an amendment to the Act regarding sanatoriums, which would permit municipalities to contribute to these institutions when outside their borders. This would be good legislation, as it is doubtful if counties or groups of counties will ever take this work up in a systematic manner; and, then, why should these institutions be strung all over the land ?

The annual meeting of the Victorian Order of Nurses was held at Ottawa recently to receive the report of the work throughout Canada for the past year. Six new branches were supplied with nurses during the year ; and since the inauguration of the Order five cottage hospitais had been opened. The Ontario Government grants amounted to $\$ 2,500$. The Dominion Government will be asked to grant money for cottage hospitals in the Territories.

Dr. RoddIck's Bill for a Dominion Medical Council has been introduced into the Dominion Parliament. The provisions are well known to the profession, and it is hoped that it will pass through the House satisfactorily. Dr. Roddick, in his address, gave the medical population of the different provinces as follows: Ontario, 2,500; Quebec, I,400 ; New Brunswick, 243 ; Nova Scotia, 476; P.E.I., 90 ; Manitoba, 344 ; British Columbia, 214, and the North-West Territories, 95 .

Dr. W. T. Grenfell, Deep Sea Missionary to the fisher folk, Labrador, lectured in Montreal recently. The doctor is also Captain of the hospital ship Strathcona. Speaking of the hospital work in Labrador, he says, there are now three hospitals, one at Battle Harbor, one at Indian Harbor, and another in course of construction at St. Anthony. The Strathcona is equipped with six beds, and all necessary appliances, including the X-rays, and cruises up and down the coast. There are two female nurses for the work and well qualified male assistants. Last year I, o20 cases were handled on the ship, and there were 62 in-patients at Battle Harbor, and 37 at Indian Harbor. Dr. Grenfell spoke of the great assistance which had been rendered them in their work by Dr. Roddick, M.P.

## Obituaries

## DR. JOHN DUFF MACDONALD, HAMILTON, ONT.

One of the foremost practitioners in Western Ontario passed away on the $13^{\text {th }}$ of March in the person of Dr. John Duff Macdonald, of Hamilton, Ont. He was in his eighty-second year. He was born on November 18th, IS19, in Scotland, and studied medicine at Edinburgh, and after graduation entered Her Majesty's ser:ice, where he remained seven years. He then came to Canada and commenced practice in Perth, removing to Hamilton in 1854. At one time he was I'resident of the Ontario Medical Association, was appointed to the Provincial Board of Health in IS90, and subsequently filled the office of chairman. He was also chief medical adviser of the Canada Life Assurance Company.

## DR. C. E. MARTIN, TORONTO.

The death occurred at Seattle, Wash., where he had gone in search of health, of Dr. Martin, who was one of the oldest practitioners of Canada. He was sixty-nine years of age and had practised in Toronto for the past twenty-five years. He was a graduate of the old Rolph School of Medicine, and had served as a surgeon in General Sheridan's cavalry during the American war. Before coming to Toronto he had practised in the town of Oshawa, Ont., and is said to have been the first physician to take up residence on Carlton Street, which has since become such a favorable site for location.

## DR. D. GAHERTY, GARILLON, QUE.

Dr. D. Gaherty, who was well known in Montreal, died the last of March after a few months' illness. He was born in Montreal forty-three years ago and after graduating at St. Mary's College, studied medicine at Bishop's College. Before going to Carillon he practised his profession in Montreal for a few years.

## Abstracts

HAMMERING TO CURE ENLARGED SPLEEN.
M. Gaston Vuillier published in the Tour du Monde recently: an account of a visit paid by him to the "Metzes," or persons exercising certain medical functions, and practising magic or sorcery among the Correzans, who have, of late years, acquired a great reputation for the successful treatment of intermittent fevers. One of them, Chazal by name, has become particularly famous for his cures of "la rate" (literally, the spleen, by which name the people there designate the enlarged organ, just as people in the West and Southwest call it "ague-cake"), enlarged liver, and even tabes mesenterica.
"Let me tell you," says M. Vuillier, "what I saw. It was indeed a strange spectacle that met my vision. Chazal, in his shirt sleeves, holding a heavy sledge hammer in his hand, stood in front of his anvil. He scemed transfigured, his eyes were blazing, an unwonted color bathed his cheeks, and his white locks floated luminously around his temples. Near him some women, draped in huge sombre capes, were undressing a little boy, lean as a skeleton, almost bloodless, whose eyes were rolling in terror.
"An old man, with bare arms, energetically worked the bellows, the alternate rise and fall of which made a loud rhythmic roar. The whole shop was lit with a ruddy reflection from the glowing coals, and shadowy silhouettes of the human figures were cast, now here, now there, as one or the other changed positions. Chazal alone stood motionless, silent, grave, his hand resting on his hammer, girt with red and cast in bold relief by the flame of the forge. At length the child stands naked, pale and rigid as marble. Chazal murmurs a few words in a quick, commanding voice.
"In an instant the child was extended on the anvil; while his mother, having seized him by the arms, another woman held his legs, the old smith, with his left hand beneath the neck, supported the head of the child, now paralyzed with terror.
"A red glow shoots up from the forge, Chazal raises his mighty hammer and lets fall a Cyclopean blow on the-anvil, close to the body, and the great mass of steel rings with the stroke. Again and again the hammer rises and falls. The whole frame of the child vibrates and shivers at each stroke. On his emaciated face and in his eyes only terror is expressed. A few mighty tears roll down the cheeks of his mother. With a savage cry Chazal resumes his battery of the anvil. The huge hammer rises and falls rhythmically, but with ever-increasing force, the blows finally causing everything around the forge to tremble. The old man environed in sparks, was meanwhile constantly stirring the fire with an iron
rod, almost white-hot, but keeping up the movement of the bellows and sending a tempest of wind through the tuycre (the 'tweeriron,' or nozzle, through which air is driven into the hearth of the forge.)
"Chazal, after a moment's rest, again raises his hammer for a blow more terrifying than all. A wild cry escapes him as the iron descends straight upon the body of the child-but it does not strike! With marvellous skill it is arrested as it reaches the scarfskin of the abdomen of the child, and with all gentleness it is rubbed over the epidermis. At this moment the old man releases his hold on the bellows and throws a cover over the fire; the infernal blast ceases. Clothes are thrown upon the child, who has fainted, and he is taken up in the arms of the women and carried off into outer darkness. The old man vanishes, and Chazal quietly puts on his coat, and I-I remain nailed to my post with stupefaction, astounded at the weirdness of the scene in which I had participated.
"I have seen many things, and taken part in many a strange proceerling, but this scene, so utterly unexpected, so peculiar and fantastic, discomposed me more profoundly than any event of my life.
"The result, the eventuality ?-I did not have time to discover." -Merck: Archives.

## PUT YOUR HEAD TO THE ENGINE.

[^1]"Any more arguments?"
" Got plenty more arguments, boss. You don't want to sleep with your feet toward the engine, because if you do the draught through the car blows right agin your head, and when it gets cold at night your head and chest are exposed. Put your head toward the engine and you feel cool without getting in no draught. It's just the same way in summer. If you sleep with your feet toward the engine you can't have your windows open, with the screen in 'em, without getting the wind and fine dust right in your face, whereas if you sleep with your head to the engine you get the cool air and no draught and dust."
"Is that all you know?"
" No, boss ; I hain't told you the biggest argument yet why you should have your head made up toward the locomotive. The most serious thing of all is the circulation of the blood in your body. You have been having your feet made up toward the engine, ch ? Well, İ reckon you don't never sleep very well in the cars, do you? Your night's res' is usually broken, ain't it? Well, sir, lemme make up your head to the enginc an' you'll slecp like you was a baby. Dat's because the motion of the train is so strong and steady that it sends ali your blood toward the end that's furthest from the engine. Put your feet to the engine and all your blond rushes straight to your head and gives you a restless night. Put your head to the engine and the blood goes away from your head, leaving it cool so you can res' like a child."
"Put my head toward the engine and stop talking, will you?"
"Yes, sir; all right, sir ; anything you say, sir. You von't gredge me that quarter in the morning, I'm a-tellin' you."
[A lapse of half an hour. Then a voice from between the curtains. It addresses the porter.]
"Solomon ; Diogenes, porter! Any arguments as to what part of a train is the safest?"
"There aren't no use of arguments about dat, sir. The safest place on a train is the middle of the middle car on the side furthest from the other track."-Diet. and Hygienic Gaz.

SOURCE OF BLOOD IN URINE.
Joseph Wiener, Jr. (N.Y. MIVd. Jour.), first attempts to discover from what part of the urinary tract the blood comes, then seeks its cause. In early life stone in the bladder, tuberculosis of prostate or bladder, gonorrhea, sarcoma of kidney, or renal disease following an exanthema may be found. Adults have urethral stricture, stone and new growths of b'adder and kidney. In old age enlarged prostate, stone and newer growths predominate. Blood appearing between the acts of micturition is from the urethra; that appearing at the beginning of stream is prostatic or from deep urethra. Clots
at beginning or end of clear urination are urethral, prostatic or vesical. In kidney hemorrhage the blood is intimately mixed with the urine. In renal hematuria, movable kidney, and renal stone the hemorrhage may appear and disappear suddenly. Rest relieves hemorrhage due to stone, or movable kidney, but may fail to influence that from tuberculosis or malignant growth. Long or short thin clots denote renal hemorrhage, long thick clots, urethral hemorrhage. If from bladder, prostate or urethra the blood readily sinks in the urine, but kidney blood remains intimately mised with the urine. If the ratio of albumin to hemoglobin is above 1 to 16 , there is albuminuria as well as hemorrhage and therefore probably nephritis. A careful examination of all the organs may show a cardiac lesion, tuberculosis, or malaria, and thus aid in diagnosis. Urethral hemorrhage is chiefly due to stricture or traumatism, prostatic hemorrhage to enlargement, stone, new growth; or occasionally to varicose veins; bladder hemorrhage to stone, tuberculosis or new growth, and renal hemorrhage to stone, tuberculosis, tumor, injury, and nephritis. Vesical tuberculosis is most frequent between 16 and 25 years, the urine is very light, odorless, feebly acid, sometimes containing tubercle bacilli; the stream is often arrested on account of pain, the bladder is irritable at night, bright hemorrhage may appear suddenly not influenced by rest ; there may be a few drops of blood at end of urination accompanied by straining ; there are distinct periods of quiescence uninfluenced by violent exertion, sudden relief of suprapubic pain and rapid cessation of pain in glands after urination and persistent post-scrotal pain; vesicle calculus is most frequent in adults, the urine is turbid, with mucus, pus, oxalates, urates, or phosphates; the stream is arrested involuntarily; the irritability of the bladder ceases at night ; the hemorrhage ceases with rest and is most profuse at end of stream; there are no distinct periods of quiescence except with rest, the pain often persists after emptying the bladder, and there is no postscrotal pain. In renal calculus the hemorrhages are usually small and frequent ; in tumor, profuse and at irregular intervals, and the pain may be worse at night. Frequency of urination at night occurs in renal tuberculosis, but only in the daytime in calculus.Med. Prog.

## THE HEMORRHAGIC DIATHESIS IN TYPHOID FEVER AND ITS RELATIONSHIP TO PURPURIC CONDITIONS IN GENERAL.

A. G. Nicholls and G. E. Learmonth (Lancet) say that from .a study of hemorrhagic typhoid fever and its relationship to purpuric conditions in general some suggestive ideas may be derived. On the whole it seems best to regard purpura hemorihagica not as a distinct disease entity, but as merely a train of symptoms. Litten would restrict the term to the so-called "idiopathic purpuras,"

Werlhof's disease, Schonlein's disease, purpura simplex, etc., and would deny it to that form met with in variola, typhoid fever, pernicious anemia, leukemia, sepsis, snake-bite, and some others. This, however, seems to be too narrow a view. The trend of modern pathological research, far from accentuating the divisions of the earlier clinicians, tends to show that the processes at work in all these different conditions are capable of unification. Most cases come under the head of "infections." In the light of our present knowledge it would be better to speak first of an "essential" purpura hemorrhagica, including under this term morbus maculosus, morbus Werlhofii, purpura simplex, peliosis rheumatica, and purpura urticans. Whether scurvy (purpura scorbutica) should be included in this class is perhaps doubtful, since "essential" purpura is a sporadic disease, while scurvy is apt to be epidemic and endemic. Some observers, however, would place scurvy with the others in the "infective" category. Babes particularly has described a bacillus which he thinks is the cause, but other observers have obtained negative results. Hemophilia certainly should not be included in the first group, since it is characterized by family and hereditary peculiarities. It might be termed a "normal" condition for certain inclividuals, and is not to be regarded as a true pathological state, since it is a permanent and not an incidental or transient condition. The second group might be termed "symptomatic purpura," and would include all those cases which are met with in the course of the infective fevers, such as typhoid fever, variola, measles, scarlet fever, pest, yellow fever, sepsis, acute yellow atrophy, icterus gravis, etc. A third group might be termed " cachectic," including forms found in pernisious anemia, leukemia, carcinoma, Bright's disease, etc. A fourth group is the toxic purpuras, such as are met with in certain forms of poisoning-snakebite, phosphorus, copaiba, antipyrin, etc. A fifth form is that found in disseminated sarcomatosis, to which attention has been called by Martin and Hamilton, where in one case which they studied there was actual sarcomatous invasion of the internal coat of the vessels, and in another emboli of sarcorna cells. Whether these were the only factors or not seems to be doubtful. The first two groups, and possibly the third, would fall under the head of "infectious" purpura.-Medical Age.

## THE SURGICAL TREATMENT OF ASCITES DUE TO CIRRHOSIS OF THE LIVER.

It is taught generally that ascites in cirrhosis of the liver is due to mechanical obstruction of the portal circulation. Where the portal congestion is relieved through existing collateral channels, ascites may be absent. Cases of cirrhosis with ascites have been recorded in which the formation of more or less extensive peritoneal adhesions, due to repeated tappings or other causes, has
been followed by recovery from ascitic accumulations. Ascites in cirrhosis of the liver may be regarded, then, as an indication that sufficient collateral circtation cannot be established spontaneously, most likely on account of absence of some of the matural but inconstant communications between the portal system and the general venous sjstem. Packard and Le Conte ${ }^{1}$ discuss the surgical treatment for the relief of the ascites of cirrhosis, brought to the attention of physicians by Talma, and first carried to a successful issue by Drummond and Morison. The various methods employed all aim at producing a collateral circulation through peritoneal adhesions. l'ackard and Le Conte have collected, from the literature, twenty-two cases in which surgical measures were resorted to for relief of ascites. The actual results are difficult of succinct statement, but contrasting tle worst view with the best construction there is found an operative mortality somewhere between 23 per rent. and 7 per cent., and the recoveries run between 41 per cent. ent 64 per cent. These statistics cannot be regarded otherwise than as encouraging. The method is still on trial, and an accurate rstimate of its value is not yet possible. Enough has been learned, however, to show that surgical treatment of ascites in cirrhosis is not absolutely contraindicated for the reason that removal of ascites is directly detrimental to health and life; for it has been urged by some that ascites in cirrhosis is an expression of toxemia, and that its removal would not tend to benefit the patient. Le Conte recommends that an inc ion be made to the left of the median line, under local or chluroform anesthesia, and that the parietal peritoreum over the liver, spleen and omentum be dried and gently rubbed with a gauze sponge, the same treatment being applied also to the surface of the organs, and the omentum stitched to the anterior abdominal wall with two or three stitches of catgut. In the meantime the ascitic accumulation may be drained off through a suprapubic opening in which a drainage-tube may be left if the latter can be cared for properly. Otherwise both wounds should be closed at once. Drainage is regarded as useful for three or four days until the adhesions become firm, but great care must be used to prevent infection. Packard and Le Conte conclude that the operation has won a distinct place, and that in the future the suitability of particular cases for the operation may be more clearly estabiished than is the case at present. They recommend the operatio: in cases of pure portal cirrhosis where persistent and well-directed medical trealment is followed by insignificant results. As yet operation is not indicated in other forms of cirrhosis. In the diagnosis of cases for contemplated operation, care should be taken to eliminate syphilitic cirrhosis, in which recovery is possible under proper medicinal treatment. The relief of ascites in
patients with atrophic cirrhosis would be a blessing, as otherwise constant treatment and repeated tappirys are necessary and the sufferers are doomed to perpetual invalidism. The carlier the relief comes, the better, because then the liver has more of a chance to regain its functions by compensatery hyperplasia in the cvent that the process of contraction is brought to a stendstill.- Sournal of the American Medical Associntion.

## METRORRHAGIA.

The etiology of metrorrhagia duc to inflammatory processes in the pelvis is discussed by Cragin, who thinks the usual order of source and sequele as regards the endometrium is: 1. Chronic congestion; 2, chronic inflammation; 3, menorrhagia and metrorrhagia. The muscle wall of the uterus itself may take part in the production of the symptom through tumors and chronic interstitial inflammation with atrophy of the muscle tissue andi increase in new connective tissue. In some cases, however, the coridition seems to be caused by lack of sufficient elasticity in the uterine muscle, interfering with normal muscle contraction. The blood vessels of the uterus, if sclerosed, so as to destroy their elasticity, may naturally produce the morbid conditions. Occasional cases are met with where the endometritis is slight and the hemorrhage seums to be due to lack of contractile power in the arterial wall. The treatment of metrorrhagia depends largely on its etiology; with chronic endometritis, curettage and relicf of congestion is best; if acute endometritis exists, cleanliness, drainage and rest. If the symptom is due to interference with the muscuiar contraction of the walls of the vessels, the treatment depends on the presence or absence of hypertrophied endometrium. The presence of the latter indicates curettage, possibly repeated several times. In the absence of hypertrophied endometrium, or if persistent after repeated curettage, metrorrhagia may justify hysterectomy.-Journal of the American Medical Assuciation.

## MULTIPLE NEURITIS AND INFLUENEA.

Raymond, in a clinical lecture at the Salpêtrière (Journ. aie Míd.) describes the case of a patient who, after a severe attack of influenza, suffered from numbness in the fingers and .toes, followed by weakness in the upper and lower extremities. This went on to actual paralysis, and muscular wasting appeared, together with pain on pressure over the different groups of muscles. There was no blddder or rectal complication. This condition lasted four or five inonths, after which the power of movement was gradually regained. The points emphasized by the lecturer are the wide
extent of the paralytic phenomena in this case. Indeed, at first sight the case might have been looked upon as a myelitis. Another patient under observation presented very similar symptoms. He had previously enjoyed good health, and was of strong constitution. He had several subsequent attacks, and after one of these he was troubled with a sense of weight in his legs, and after a short time he was quite unable to stand upright. In this instance the neuritis affected chiefly the nerves of the lower limb. The lecturer points out that, as a rule, the prognosis of influenzal neuritis is generally satisfactory, and they usually get well under electrical treatment and strychnine internally.-British Med. Jour.

## INTRAVENOUS INJECTIONG OF NORMAL SALT-SOLUTION IN PUERPERAL HEMORRHAGE.

Maygrier (Journal des Praticiens) gives detailed histories of 15 cases of hemorrhage treated by normal salt-solution injected intravenously, 7 of whom recovered. The other 8 died. In 7 cases, hemorrhage was due to vicious insertion of the placenta, to abortion, and to premature detachment of the placenta, each, in 2 cases; and it occurred with child-birth in 4 cases. The amount injected varied from 700 to 2,000 grams. In many cases, subcutaneous injections were given besides. The indication for the injection is the severe anemia, the lowered general condition. Maygrier advises intravenous injections when subcutaneous injections have no effect, or when death seems imminent. They should even be repeated if necessary.-Philadelphia. Medical Journal.

## Physicians' Library

Rhinology, Larynsology and Otology, and their Significance in General Medicine. By E. P. Friedrich, M.D., Privat docent at the University of Leipzig. Authorized translation from the German. Edited by H. Holbrook Curtis, M.D., Consulting Surgeon to the New York Nose and Throat Hospital and to the Scarlet Fever and Diphtheria Hospitals. Octavo, pp. 348. Philadelphia and London: W. B. Saunders \& Co. Ig00. Toronto: J. A. Carveth \& Co. Price, $\$ 2.50$.
This excellent work is written by a man who is thoroughly versed in rhinology, otology and laryngology as well as with the pathology and symptoms of general disease. He is, therefore, in a position to present the relations of these specialties to general medicine in an accurate and attractive form. Dr. Friedrich takes the stand that the general practitioner should not neglect the study
of the specialties, and that the specialist should be familiar with general medicine.

The importance and extent of the work cannot be accurately estimated until one has carefully read this or a similar book. The relations of the diseases of the nose, throat and ear with those of the respiratory tract, circulatory system, kidneys, skin, sexual organs, eye, etc., are all considered. The chapters treating of nervous diseases and exanthemata are particularly interesting. Dr. Curtis is to be congratulated on the good translation, and W. B. Saunders \& Co. are to be commended for the enterprise they have shown in introducing so many valuable German works.

Saunders' Pocket Medical Formulary-With an Appendix. By William M. Powell, M.D., author of "Essentials of Diseases of Children," etc. Sixth edition, thoroughly revised. Philadelphia: W.B. Saunders \& Co. 1900. Toronto : J. A. Carveth \& Co. Price, $\$ 2.00$.
This is a neat little book containing a large number of prescriptions, dose-tables, poisons and antidotes, diet notes, obstetrical table, tables of incompatibles, weights and measures, diameters of the female pelvis and fetal head, etc. The prescriptions have been mostiy copied from standard text-books. In this edition the compiler has added some two hundred new formulæ and brought the dose-table up-to-date.

[^2]this the special histology of the blood, heart, vessels, digestive organs, genito-urinary organs, skin, nervous system, etc., is taken up and described from both the theoretical and rechnical standpuints. We think that all parts of the work are good, but that the sections on histology of the nervous system are particularly excellent. The illustrations are numerous and admirably executed.

A Text-Book of the Diseases of Women. By Henry J. Garrigues, A.M., M.D., Gynecologist to St. Mark's Hospital, New York City. Octavo volume of 756 pages, with 367 illustrations. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders \& Co. 1900. Toronto: J. A. Carveth \& Co. Price, $\$ 4.50$.
This work is well known to the medical profession as an eminently practical text-book, and the earlier editions were well received by both students and practitioners. The simplicity of the text and the excellent illustrations make it a valuable book for beginners, and at the same time it is sufficiently complete for a general practitioner. It was the aim of Dr. Garrigues to write a practical work, and therefore he has paid more attention to the diagnosis and treatment than to pathology and theoretıcal discussions.

In this edition the entire text has been thoroughly revised and considerable new material and many illustrations have been added, bringing the work up-to-date. We believe that it is one of the best books published on the subject.

Ouer 1,ooo Prescriptions or Favorite Formula of Various Teachers, Authors and Practising Plysicians. The whole being carefully indexed, and including most of the newer remedies. Cloth, 300 pages, postpaid $\$ \mathrm{i} .00$. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.
This is the second edition of this book. It has been eniarged by the addition of 106 pages of new matter. The bulk of these prescriptions have appeared in the columns of Leonard's Illustrated Medical Journal, and have been collected from the writings of many well-known physicians.


[^0]:    * Specially reported for Dominion Medical Monthly by Dr. George Elliott.

[^1]:    "How will you have your feet?" the porter asked in a Wagner car coming from Buffalo.
    "Feet to the engine," said the passenger.
    "If you travel much you will have your head put next to the engine," said the colored man.
    "IIo," said the passenger, "I am afraid there might be a collision and then I would be thrown with all my weight against my head." The porter chuckled.
    "I beg pardon, boss," said he, " but I notice that all the railroad men has their heads put toward de engine-and all the commercial travellers also. The biggest arguments is in favor of doing that way. In the first place there ain't many head-on collisions. There's more danger of a rear-end collision. The reason is that every passenger train has its own right of way, and runs regularly every night, and is looked out for by all the trains that's running ahead of it. Therefore, the most danger is from something behind which don't know when we have stopped or broke something, and which runs into us unexpectedly. There ain't any one looking out for any kind of collisions, 'cause when they come it matters mighty little which end you're putting forward--your head or your feetbut if you insist look out for 'em from behind."

[^2]:    A Text-Book of Histology, Including Microscopic Technic. By A. A. Bohm, M.D., and M. VON DAVIDOFF, M.D., of the Anatomical Institute in Munich. Edited, with extensive additions to both text and illustrations, by G. Carl Huber, M.D., Junior Professor of Anatomy and Director of the Histological Laboratory, University of Michigan. Authorized translation from the second revised German edition by Herbert $H$. Cushing. M.D., Demonstrator of Histology and Embryology, Jefferson Medical College, Philadelphia. With 35 I illustrations. Philadelphia: W. B. Saunders \& Co. Toronto: J. A. Carveth \& Co. Price, \$3.50.
    This is an English translation of the second German edition, and contains in addition much valuable matter and many illustrations which will no doubt greatly enhance the value of the book. The German edition may be said to contain the subject-matter of the lectures and demonstrations in histology given by the authors to the students in the University of Munich.

    Microscopic technic and the general histolosy of the cell and of the various forms of tissues occupy the first 160 pages. Following

