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THE DOCTOR'S DECLARATION OF INDEPENDENCE.

G. HENRI BOGART, M. D.

PARIS, ILL.

The war is working a miracle in the cure of mental cataract of the American medical profession, as in the usual run of surgical operations there is present discomfort and inconvenience attached to the cure. The glamour of an over the seas origin takes strong hold on the average American, especially affecting modistes and physicians, setting them "half seas over" with an auto-intoxication that leaves a large dark brown taste when the stimulant is withdrawn. Few of us realized the extent to which we had surrendered the production of drugs, chemicals and surgical appliances to the foreigner until war closed our avenues of supply. The fault has lain with the individual practitioner, and at that the fault has been large-

ly unconscious, the old story of "Didn't know it was loaded."

Keen practical American invention and investigation is fully able to meet any emergency of production, and while we have vain-gloriously shouted ourselves black in the face over our superiority; we have choked that same productiveness black in the face by refusing to yield the demand that would have forced the supply.

Tom Edison was the largest consumer of carbolic acid in America, and his supply of the chemical was from abroad until the war threatened the closure of one of his recent developments. The wizard of Menlo Park did not close that shop. He investigated the plans for making synthetic carbolic acid, decided which he preferred, built a factory, installed the machinery and within thirty days was producing what he needed and more for the general trade, with better quality and cheaper than it had ever before been done. All he needed was the spur of necessity.

The textile industry was practically paralyzed by the lack of coal-tar colors. Walter Rittman, one of the chemists of the Bureau of Mines, was set to find an American source. He experimented in the laboratories of Columbia University, and has just announced that he has discovered abundance of tuluol and benzol, the basis of coal-tar colors and high explosives, in crude petroleum, and incidentally, has doubled the amount of gasoline yielded by a given amount of the crude, and at the same time cheaper, and with less danger than the old method. This discovery has been patented for the use of the whole American people. When one remembers that there are two million gas motor vehicles in America, and that there will be more than half a million more put out this season, he is inclined to swell up with pride over the achievement, forgetting that the same gas engine in manufacturing, agriculture and irrigation is worth more than even the stupendous motor industry, all of which may thank the impetus of war restriction for the relief of what was fast becoming an impossible condition.

Annually we spend millions of dollars in teaching science, then fail to cultivate the possibilities of our graduates by closing the

markets that would support their abilities and ambitions, as shortsighted a procedure as that of the gardener who sets thrifty plants, then neglects them and allows weeds to choke them.

For years a stable, simple combination has been on the market for the induction of the kindly anesthesia now called Twilight Sleep, something that any physician of average ability and intelligence could use in the ordinary home, and little was said about it. Even medical men spoke slightly of it. It was made in America! But when the reporters for the magazines heard of the German procedure, they jumped at the sensationalism of proclaiming release from the pangs of child-birth, and exploited it in the lay press, giving priceless advertisement to the something from over the sea.

Patriotism may consist in defying the cannon, carnage and courage of conflict, or it may be found in the common, every-day duty of upholding what is our own. The steady starlight is better than the glare of the meteor, the current flowing through the arc lamp is more dependable and beneficial than the lightning's blaze.

There is a patriotism that is spectacular, and another that lets not its right hand know what the left doeth; there is a patriotism of death and carnage, and another of life and beneficence; there is a patriotism of destruction, and another of construction, building up happiness with no background of grief and suffering and future burdens from warfare; there is a patriotism that simply remembers to apply common sense to its every-day actions and desires.

All that is needful is that every medical American, man or woman, enlist in the Home Guards, by adding his mite to the demand for supplies "Made in U. S. A." What we need is to see our need, after seeing that we declare anew a Declaration of Independence, with the sturdy fortitude of the heroes of Valley Forge only, we will not be compelled to suffer in this our time, not of excuse, but of opportunity.

Good comes from all evil, our profession should grasp the good that begs us to make it our very own.

The Commercial Club of St. Paul has organized a charity committee, the purpose of which is to co-operate with all the charities in the city and to work for any civic project which seems desirable. The first work of this committee is to be in behalf of the county sanatoria appropriation, and the work is to be commenced at once in the legislature and out through the State.

LARREY.

A. ROSE, M. D.

NEW YORK

Larrey was the chief surgeon of the French army in all campaigns of Napoleon. It was Larrey who had created the medico-military system of the French army of that time beginning with the wars of the Revolution. The taking up of the wounded from the firing line, new methods of operation, the organization of a sanitary corps, all that was the work of this one man, and from this point of view alone he was, no doubt, the first of his time. He has left us his memoirs, which have been pronounced as unique of their kind. Billroth spoke of Larrey as the first surgeon of all times.

Of special interest to us is the fact that in all of Larrey's writings we find the principles of *asepsia*, although not known yet by that name.

Larrey had a humanitarian idea of high moral value, and his humanity consisted foremost in quick execution of operation in order to shorten pain and in insisting that greater operations should be performed within twenty-four hours while the battle was going on—the severest wounded to be operated on first.

At his time, when anaesthesia was yet unknown the quickness of the operation was wonderful. Precise reports have been given according to which the amputation of an extremity, even amputation at the hip joint, the ligation of the blood vessels included, was done in four minutes. At the battle of Borodino Larrey performed 200 amputations within twenty-four hours.

We are under the impression that before anaesthesia was introduced in surgery greater operations must have had a barbaric character, but from Larrey's writings we learn that such was not the case. Patients would scream but become calm as soon as they were placed on the operating table, and after the operation remarkable euphony was noted. Some would even go to sleep immediately. The quickness with which the operation had been performed and the relief following it had a good effect on those who were next to be operated on; they gave their consent readily. It was Larrey's principle to obtain the patient's consent before operating.

It is true the significance of earliest possible care for the wounded had been understood, but no organizer had appeared to realize it; it was left to Larrey during the war of the French revolution to institute

this early aid, to introduce ambulances going to the firing line.

The great number of invalids with wooden legs, a typical sight during the first part of the nineteenth century was an illustration of the superiority of Larrey's principles compared with those of the surgeons of the time of Frederick the Great; the latter cared for the wounded not during the battle, like Larrey's surgeons, but after the battle. The wounded in the wars of Frederick the Great, when the surgeons and their aids had to remain with the train until the battle was over, received the first aid, as a rule, many hours after waiting in agony. Since Larrey the activity of the surgeon begins with the first cannon. The long list of surgeons killed in the present European war proves the observation of Larrey's principles.

Larrey describes his impressions during an engagement between Houchard and the Prussians in the year 1792: "We had 30 wounded, who—it was this the first time in history—were dressed on the battle-field and then transported. The battle itself made upon me, who was such close witness, a lively impression; however the thought, that I could give so early and sure relief calmed me soon, and after this I witnessed the battles with composure."

General Bonaparte understood that the ambulances were the means to reduce the number of victims of war and at his order given in the year 1797 ambulances had to go to the battle lines. Larrey in his memoirs writes in detail on this resolution of Napoleon. The mere sight of the ambulances had a good effect on the soldiers, increasing their courage. Larrey writes: "In the terrible battle of Wagram I followed with my ambulances all movements of the guard up to the decisive moment, all the wounded were dressed on the spot when they were taken up, and in the evening I had already 500 of them in the hospital; most of these had received severe wounds necessitating great operations; I am certain without the quickly performed amputations the majority of these wounded would have perished."

When Larrey after the capitulation of Alexandria visited the English lazarets he found all arrangements excellent, but was surprised to find only three who had survived amputation. These poor results of the English colleagues who had performed a large number of amputations made him say: "it proves the superiority of French surgery over that of other civilized nations."

At the battle of Borodino he made 11

extirpations of the arm; of these 9 recovered while 2 died during evacuation; 8 of the operated, as he learned afterwards, arrived happily in Prussia and in France. The most remarkable of these was the chief of a battalion who immediately after the operation mounted his horse and came home with the survivors of the great army. From



LARREY

the battle of Leipzig several of the exarticulated returned to France marching. Even soldiers wounded and operated at Borodino arrived in Paris notwithstanding rare or even no change of dressing. It was probably on account of their not having entered infected hospitals—the miserable condition of which I have described in my book* that they were saved.

In our text-books we read that Kussmaul was the first, who, in the year 1869, introduced the stomach tube in therapy, while, in fact, it was Larrey who had already employed it to nourish patients in cases of dysphagia. Murat who had been shot in the neck by Mamelukes at Abukir in such a way that the upper part of the larynx was coughed up, was for weeks nourished by means of the stomach tube. Larrey cured him so well that he could return to France. With his voice regained he was later on enabled to command the largest cavalry masses which

* Napoleon's Campaign in Russia Anno 1812.

ever had been united under one commander, for the powerful attacks of Napoleon.

Larrey had also employed the stomach tube to nourish tetanus patients. Characteristic of Larrey's success and new in the history of surgery were the results of his amputations, namely, 75 to 80 per cent recoveries. These good results were due to his correct indications, his admirable technic and his organization of surgery on the battle-field, he called it the twenty-four-hour principle.

The Napoleonean year of peace—1811—allowed Larrey to write three volumes of his memoirs on his campaigns. During the years 1812 and 1813 his activity as surgeon-in-chief was so great, and the events of these two years so overwhelming that he could not find time for tranquil study, nevertheless his notes on the retreat from Moscow to Koenigsberg are admirable.

Larrey was a man of noble simplicity in language and manner, like Eblé, the savior of the Beresina. According to Napoleon's saying Larrey and Eblé were the only two who could demand everything from the soldiers, even the superhuman.

I may be permitted to recapitulate from my book an episode from the days of the Beresina:

"The great surgeon Larrey tells how he nearly perished at the crossing of the Beresina, how he went over the bridge twice to save his equipment and surgical instruments, and how he was vainly attempting to break through the crowd on the third trip, when, at the mention of his name, every one proffered assistance, and he was carried along by soldier after soldier to the end of the bridge.

"He has related the incident in a letter to his wife, dated from Leipzig, March 11th, 1813. 'Ribes,' says he—Ribes was one of Napoleon's physicians—'was right when he said that in the midst of the army, and especially of the Imperial guard, I could not lose my life. Indeed, I owe my life to the soldiers. Some of them flew to my rescue when the Cossacks surrounded me and would have killed or taken me prisoner. Others, hastened to lift me and help me on when I sank in the snow from physical exhaustion. Others, again, seeing me suffer from hunger, gave me such provisions as they had; while as soon as I joined their bivouac they would all make room and cover me with straw or with their own clothes.'

"At Larrey's name, all the soldiers would rise and cheer with a friendly respect.

"Any one else in my place," writes Larrey further, "would have perished on the bridge of the Beresina, crossing it as I was doing,

for the third time and at the most dangerous moment. But no sooner did they recognize me than they grasped me with a vigorous hold, and sent me along from hand to hand, like a bundle of clothes, to the end of the bridge."

In the year 1818 died in Poland at the age of 86 years General Zajacek whom Larrey had amputated his leg with instruments from those boxes which he had saved crossing the Beresina—an operation done on the snow under the cannon of the enemy on a man of 80 years of age.

The chapter on the days of the Beresina tells us of heroism unsurpassed in history, of the greatest hero surgeon,—Larrey.

173 Lexington Ave.

P A R E S I S .

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Synonyms.—Dementia paralytica. General paralysis of the insane, parietic dementia. The name paresis is now in common use.

Paresis is an affection which is not usually classified among nervous diseases. However it is attended by organic changes which involve the nervous system as a whole, especially the brain and also the cord and peripheral nerves.

Sometimes its first symptoms are purely peripheral, when cerebral and mental symptoms make their appearance relatively late, but in the majority of cases mental symptoms appear early. At first they are exceedingly ill-defined, vague and general, and in keeping with the fact of a diffuse involvement of the brain. This involvement we will see is organic. It consists of a slowly oncoming progressive dementia which is attended by certain characteristic physical signs.

Etiology.—Syphilis.—It is true that a percentage of cases exists in which no history of syphilis can be obtained nor indeed of any venereal infection whatever. But in most of the cases the statements of the patients, as to their past history, are not trustworthy. All paretics are very tolerant to iodides and mercurials.

According to Hoche the Wassermann reaction is positive in the blood in 98 per cent and in the spinal fluid in 100 per cent. Without a previous syphilis there can be no paresis. According to one theory general paresis is but a late manifestation of still

active syphilis (Plant and Fischer) According to another theory (Kraepelin), general paresis is a disease of auto-intoxication. Syphilis produces a disorder of metabolism which results in the formation of a toxic substance, which, in its turn, causes the lesions and symptoms of paresis. Some claim, like Fournier, that paresis is a disease of syphilitic origin, a parasymphilitic affection. Others believe with Joffroy, that syphilis is but an adjuvant—a powerful one it is true—which favors the occurrence of the disease but does not alone suffice to produce it. Investigators have recently demonstrated the presence of the spirocheta pallida, the recognized cause of syphilis, in the brain and spinal cord of paretics.

A. Predisposing Causes.—Sex.—Men are much more liable than women to paresis. The disease is exceptional among women in the country. The proportion of male to female paretics in the large cities is 4 to 1. Age.—Rare before thirty years. Paresis may be met with in youth, constituting the juvenile form.

Social Factor.—Paresis seems to be the sad privilege of cultured men. But it affects the working class as well. Paresis occurs very infrequently among women of the upper class; but is relatively more frequent among men of the same class. Among the women of the lower classes (especially prostitutes) the number is much greater, though here also men still predominate.

Geographic Distribution.—Paresis is common in England, France, Germany, America, Italy and the Slavic countries. Dercum says it is relatively rare in Scandinavia, Iceland, the Mohammedan countries and India. This statement coincides with the writer's observations. In other words extreme climatic conditions as in the torrid and frigid zones seem to exhibit less paresis than the rapid changes of the temperate zone. However syphilis as a factor as is common in one country as in another. Therefore we are inclined to press the fact of a rapid variance in climatic conditions to the temperate zone as a prominent etiological factor.

B. Alcoholism.—Exciting Causes.—Chronic alcoholic poisoning is in many cases a powerful contributing factor.

Trauma.—Regarding trauma it may be definitely stated that the relation between it and paresis is that of sequence only. Sometimes the phenomena of paresis appear soon after an injury. In most cases, however, they appear after an interval of varying duration. Trauma alone however does not cause paresis.

Overwork, emotion, sexual excesses, act

through the general impairment of health which they bring about.

Pathology.—*A. Encephalon.*—Dura Mater.—Congested, much thickened, often presenting hemorrhagic pachymeningitis. At times cysts are formed adherent to the dura and covered by a thin membrane containing fluid.

Pia, Arachnoid and Brain.—The pia is thickened and whitish. The internal surface of the frontal poles are often adherent. There is a flattening of the convolutions and a thinning of the cortex. The ventricles are dilated and the choroid plexuses may contain many cysts, the ependyma especially of the fourth ventricle, and the inner walls of the lateral ventricles present granulations. These granulations are composed of an increase of neuroglia, which in many cases has undergone hyaline degeneration. There is a diminution of the weight of the brain most marked in cases of slow evolution, often very slight or absent in cases of paresis of a rapid course.

The nerve cells change in number, shape and structure. Many cells disappear, the angles becoming blunt and the cell-body reduced to a small pigmented mass. The nerve fibers suffer atrophy. Where the clinical course has been prolonged and the nerves are much degenerated there remain but a very few normal fibers.

The blood vessels are increased in number and their walls thickened. Some of the vessels are dilated, a few obliterated, and others show small aneurisms. The perivascular spaces are infiltrated with cells.

B. Spinal Cord.—The degenerations are similar to those in the brain. In many cases there is a descending degeneration in the pyramidal tract; in others, changes in the posterior columns. The spinal fluid is increased. In the internal organs vascular changes are so frequently found that they seem to bear a definite relationship to the disease process.

Symptomatology.—There are four forms of paresis, each one showing different mental symptoms. Namely, the demented form, expansive form, agitated form and depressed form.

1. *Demented Form.*—The demented form is characterized by a gradual progressive mental deterioration without prominence of hallucinations, delusions or great psychomotor disturbance. The onset in this form is very gradual. The patient complains of loss of energy, indefinite pain, pressure in the head and forgetfulness. They are usually good natured. Some patients drink to intoxication and indulge in sexual excesses.

Patients are reckless and may even act in

opposition to established precepts. The consciousness becomes clouded and the patient becomes unable to perform his duties. He fails to recognize friends and localities. Soon all insight is lost. Patients have transitory hallucinations and delusions. There are some emotional changes, such as weeping and praying. But soon the patient becomes dull and apathetic. They are satisfied as long as they have food, drink, tobacco and the necessities of life. Some patients become restless, wander about, are inaccessible, repulsive and angry. This form of paresis constitutes 40 per cent of all cases. In this form, the duration of the disease is short, about 1 to 2 years. Paralytic attacks occur in about 50 per cent of these cases.

2. **Expansive Form.**—The expansive form is characterized by greater delusions, a longer course, and greater remissions. The onset is gradual with change of character, failing memory and judgment. The patient complains of fainting spells, headache and intestinal disturbances. The patients express feeling of well-being and happiness. They have wonderful delusions about themselves, but soon pass into the realm of absurd imaginations.

For instance: A soldier thinks he is the commanding general of all European and American armies and is fighting with the Japs with great success. A former policeman finds every criminal on earth and receives a large salary from all nations. A bank clerk has a scheme to control the money market, and a prostitute is married to a king. The delusions become more incoherent and dreamy. In the later stages the patient is cheerful, always feeling good, even if they are bedridden and filthy. Even on their deathbed they say they feel fine. Some patients again fight imaginary enemies, are reckless, aggressive and impulsive. This form constitutes 16 per cent of all cases. The duration of the disease is longer, about 3 to 8 years, due to the remissions. Some cases change from the expansive to the depressive form and vice versa.

3. **Agitated Form.**—The agitated form has a relatively sudden onset with great psychomotor excitement and delirium. In this form the delusions are extremely expansive and there is a great clouding of the consciousness. The course is short. The prodromal symptoms are lacking and they rapidly develop extreme megalomania. The patients think they are God; have created God, or own heaven and hell. Their ideas seem to surpass the boundary of imagination. Some patients develop what is called

galloping paresis. These cases present extreme excitement and profound clouding of consciousness, which leads within a short time to fatal collapse. The agitated form represents about 11 per cent of all the paretics. The duration is in most of these cases less than two years. Paralytic attacks occur frequently and remissions in about 25 per cent of the cases.

4. **Depressed Form.**—This form shows despondency and depressive delusions. It begins with general malaise, headache, numerous pains and failing memory. The patients are hypochondriacal and their complaints become senseless. Some complain that their stomachs are filled with stones, their intestines are gone, their blood turned to water, that they have millions of electrical wires in their body which are controlled by some one, and so forth. These patients have delusions of self-accusation and persecution. Some cases show great anxiety and restlessness. They pace back and forth and groan and moan, later there is a more less stuporous state. This form comprises about 25 per cent and appears late in life. Paralytic attacks frequent. Most cases die within two years.

Motor Disorders.—Paresis shows very frequently the phenomena of paralysis in the most varied types; monoplegia, hemiplegia or facial paralysis. The paralysis is either flaccid or associated with contractions. A certain degree of motor aphasia is often observed. Paralysis in many cases follows a seizure and is usually transitory. Choreiform movements are often observed. Disorders of reflexes and sensations are found in most cases of paresis.

General Disorders.—The Digestive Apparatus.—Vomiting, constipation or diarrhea are apt to occur. Cardiac symptoms are very frequent. There may be myocarditis, cardiac insufficiency. Slight albuminuria and renal insufficiency are often present. Paretics are prone to have pressure-sores and hematomata.

Diagnosis.—The depressive form of paresis is distinguished from melancholia of involution by the evidence of mental detraction. It often happens that periods of excitement at the onset of the disease are mistaken for delirium tremens, especially where early paretic symptoms have escaped notice in an alcoholic. Dementia precox is usually differentiated by the absence of the characteristic physical signs, good orientation, and the presence of catatonic features.

Prognosis.—It need hardly be stated that the prognosis as regard to life is uniformly unfavorable. To this rule there is no ex-

ception. Death occurs from cachexia, or from complication, or as the result of an apoplectic or epileptic seizure. The average duration of the disease is from two to three years. There is, however, no fixed rule with regard to this. In exceptional cases the disease lasts but several months or even weeks (galloping paresis); in other cases, on the contrary, it is prolonged for ten or more years. The progress of the disease may be interrupted by remissions. Rarely, except at the beginning, are the remissions complete. Almost always the pre-existence of a certain degree of mental enfeeblement, or at least of a psychasthenic condition, and of physical signs exclude an idea of true recovery.

Pneumonia, septicemia following wounds, and intercurrent disease are often the direct cause of death.

Treatment.—This is but symptomatic. It is admitted by all, that specific medication exercises absolutely no favorable influence upon the course of the disease. Special care in regard to cleanliness is absolutely necessary. Kraepelin advocates warm baths of long duration.

Authorities: De Ponsac, Dercum, Kraepelin.

JOINT-BODIES FROM WITHIN IN ARTICULATIONS OTHERWISE APPARENTLY NORMAL.

AIME PAUL HEINECK, M. D.

CHICAGO

The joint-bodies herein considered occurred in joints otherwise sound or presenting lesions determined by the joint-bodies themselves or by the violence responsible for their presence. Joint-bodies due to local articular disease (tuberculosis, gonorrhea, suppurative arthritis); secondary to systemic disease (nervous arthropathies, tabes dorsalis, etc.); symptomatic of mono- or poly-articular arthritis deformans, constitute other chapters of pathological anatomy and, therefore, are not considered in this contribution.

Therefore, in formulating our conclusions, we eliminated:

1. Cases reported with insufficient data or with only unimportant details.
2. Supposed or true cases of fragmented, displaced or detached semi-lunar cartilage.
3. Cases of extra-articular bodies which previous to operation had been mistaken for cases of joint-bodies.
4. Cases of extra-articular bodies of intra-articular origin.

5. Cases of joint-body lodged in joint-capsule diverticula, communicating, or not, with the general synovial cavity.

6. Cases of a nature so distinct from that of the joint-bodies herein considered that their inclusion would serve no useful purpose, would needlessly confuse the reader (pedunculated chondro-sarcomata).

7. Cases in which pre-existing or co-existing disease of the articulation can be considered a contributory etiological factor.

8. Cases of mono- or poly-articular arthritis deformans.

To avoid misstatements and to have accurate data as substructure of our conclusions, in all the cases considered, the diagnosis was verified either at the operating, dissecting or post-mortem table.

We attempted to determine the following facts relative to joint-bodies originating within the organism:

- a. What is their incidence: 1. As to age? 2. As to sex? 3. As to articulation involved. 4. As to association with pre-existing or co-existing, congenital or acquired, anomalies of the affected articulation?
- b. Their etiology, structure and pathological anatomy.
- c. Their symptomatology.
- d. Their differential diagnosis.
- e. Their treatment—operative or non-operative. If operative, should one resort to local or general anesthesia? To joint-lavage? To joint-drainage? To immediate closure of the articulation? To immobilization? What is to be the nature of the post-operative treatment?
- f. Results of operative treatment.
- g. Conclusions.

Basing ourselves upon a careful study of the English, French and German literature of the last twenty years, upon our clinical experience, we came to the following conclusions: It can be asserted that—

1. Joint-bodies are found in articulations otherwise normal or presenting only such anatomical change as are induced by the joint-body or bodies.
2. They occur in joints, the seat of pathological states (congenital or acquired), having no relation, either as cause or effect, to joint-mice.
3. They can co-exist with various articular lesions either due to the same causative violence, or secondary to joint-body irritation or to totally distinct and independent causes.
4. They occur at all ages, in both sexes, in the white and colored race. They are met with maximal frequency in the male sex and during the third and fourth decades of life.