The diseases of the *muscles* of the eye have special interest for the neuropathologist, for commencing cerebro-spinal trouble very often first makes itself known by difficulty in the ocular muscles, and double vision is often the first symptom of the disease. Complete oculomotorius paralysis we may refer to a cerebral cause, whilst partial paralysis very rarely can be done so. I may recall in this connection the crossed double images of drunken persons, and the divergence of the optic axes in chloroform sleep. We know that very various affections of the brain may produce such paralysis of the oculomotorius, but syphilis seems to be a very frequent cause. According to von Graefe's observation paralysis of accommodation with mydriasis is sometimes the forerunner of mental affections, especially when the former is transient, frequently recurring and affecting the two eyes alternately. The so-called diphtheritic paralysis is still more interesting here, occurring often after diphtheria of the fauces and causing especially paralysis of accommodation, occasionally combined with paralysis of the soft palate and œsophagus. This paralysis comes on always a few weeks after the cure of the local diphtheritic affection. Very little is known in regard to the nature and causes of this paralysis, as Nagel says, we do not even know whether they are central or peripheral. On the one hand it is thought that the alteration in the mixture of the blood associated with the general disease, causes morbid processes in the central organs of the nervous system; on the other hand many cases of unilateral paralysis with unilateral throat affection speak for a local extension of the trouble from the periphery; finally, Zenker, who has seen the same degeneration of the muscles in typhus and in diphtheria, attributes a myopathic origin to diphtheritic paralysis. Müller's hypothesis seems to be little supported, namely that the frequent paralytic ocular affections are due to the extension of the morbid process from the palatine nerves, through the nervous filament running from the spheno-palatine to the ciliary ganglion, which filament Hyrtl considers fibrous. As we know, the course of diphtheritic paralysis of accommodation or of the muscles of the eye is favorable, and followed in a few weeks by complete restoration. (Nagel.)

We have thus reviewed all the separate parts of the eye, and seen how each is associated with affections of the general organism.

A REMARKABLE CASE OF TOXÆMIA STRIKINGLY SUGGESTIVE OF GLANDERS.

By W. H. TRIPLETT, M.D., Woodstock, Va.

[Communicated for the Boston Medical and Surgical Journal.]

UNDER this caption, I propose to report a unique case of blood-poisoning, which I think is well worthy of a place in your JOURNAL. Its origin was so obscure, the peculiar manner of introduction of the

disorganizing agent so mysterious, as were also its accompanying phenomena, that I prefer to give a simple detail of its prodroma and cropping out, and allow my professional brethren to form their own deductions and assign it its proper place in the pathological table. I am not one of those who believe in the generation of new diseases, nor am I willing to admit even a "change of type" in the old. In many cases that are veiled in doubt and obscurity, the *modifying influence* may be discoverable in the previous history of the patient. As to acute febrile disorder, whatever be the morbid agent, when it varies much in the expression of its peculiar phenomena, we are at a loss for information fixing its specialty. This in large measure is attributable to our want of more definite knowledge of the condition of the blood and of the secretions which attends these acute disorders. Unquestionably the field of research lies in the fluids of the body, and our hope of advance will never be realized till the hand-maids of medicine, microscopy and chemistry, come to our relief.

In the present state of our knowledge we are compelled to wait for days to elapse before we can say this is a case of syphilis, of small-pox, of typhoid fever. Shall we always labor under these disadvantages? always be compelled to wait for the cropping out? wait for expressive blossoms? wait till the fermentative process has impressed the zymotic action on every blood-cell, fibre and constituent of the body? This is not the worst of it; if the cropping out is tardy or irregular, our perplexity increases, and we feel more than ever chagrin over our ignorance and incapacity. Unquestionably the finer part of medicine has yet to be learned.

If the subjoined case was one of pyæmia, then I must confess that there were certain irregularities in its manifestations that I had never seen before. If it were one of transmitted glanders, its prodroma were most unusual and significant.

On April 30, 1867, I was called to see Robert F., aged 20, clerk. Complained of severe pain in the calves of his legs. Had taken a walk several days previously of five or six miles, and had felt badly ever since. His pulse was nearly natural; skin comfortable; secretions all well performed. The parts were very painful on pressure, but were not discolored or much swollen. I believed it to be a case of simple myositis from over-exercise, and ordered rest and Dover's powder, with quinine three times a day.

The next day he pronounced himself better, though his legs were still sore and painful, and he was unable to walk upon them. After limping about the house on crutches for four or five days, he got worse, and sent for me again. His calves were now hot and tender, and appeared more swollen than when last seen, though there was no crisperatous blush of the skin. The left was more painful than the right. His pulse was soft, and beating 90 to the minute; tongue a little furred, and his appetite not so good as it had been; no motion from the bowels for two days; skin and kidneys secreting very

well. Gave saline purgative and applied wet cups to his legs; when removed, to have them swathed in hot flannel saturated with Fleming's tinct. rad. aconiti. To have half a grain of opium and two grains of quinine every four hours. Milk diet.

May 10th.—Rested well last night, and the pain in his calves much relieved. Complains this morning of *soreness* all over him, particularly in his forearms and hands, the backs of which are puffed, and there is an erysipelatous blush along the middle metacarpal bones, with tenderness on pressure, as if their periosteum was involved. Pressure upon all the long bones gave him pain. Pulse 110, and a little sharp; skin dry; tongue furred; complained of headache and of general distress. The case, as it now stood, was exceedingly obscure—none could be more so. Ordered antimonial saline mixture to relax his skin and establish the secretions. Milk diet.

11th.—Did not rest well last night, though he had taken a large Dover's powder, with morphine. Skin very hot and dry; tongue dry and brown in the middle; pulse 130, very full and hard; hands and forearms very much swelled; the erysipelatous blush had extended over the hands, and the left elbow was red, swollen and painful; the bridge of the nose was red. On looking at his feet they were found discolored above and a little puffed. Abdomen tympanitic. No motion from his bowels. Urine *copious* and high colored. I now became alarmed for the safety of my patient. It was quite evident some powerful irritant was introduced into the circulation, but what it was puzzled me in the extreme. Thinking over the blood poisons, I began to suspect pyæmia, but where was the nidus? I again re-examined his calves, but could find nothing suspicious in their appearance. I thought they seemed a little full, but the man had a fleshy leg. I *thoroughly* examined them, and was still in doubt. I thought one of them a little too pendulous, and believed I had discovered *fluctuation*.

I took another physician to see him, but he could discover nothing to throw light upon the case. I made an exploratory puncture into the more suspicious looking calf at its most pendulous portion, but after burying the point of the instrument upwards of an inch nothing but thin blood flowed out of the wound. I now carried it down nearly its whole length, when it suddenly jumped into a cavity. Dark-looking blood and pus welled up through the opening. Making a free incision, large firm black coagula, swimming in a dark fluid formed of disorganized blood and ill-looking pus were extruded. Quite a quantity was discharged. The left calf was treated the same way with the like result, though the collection did not lie so deeply, nor was the quantity so large as in the right leg. The case, then, was one of pyæmia, which had its foci at the hæmorrhagic points, but whether the immediate result of local phlebitis or dependent upon absorption of a peculiar irritant generated at those points could

not be told. But *after* the bad collections had been evacuated the constitutional irritation did not subside; however, this does not settle the point at issue, since it has been fully demonstrated by cases of accidental *inoculation*, that pyæmic irritation does not depend upon the *quantity*, but rather the *quality* of the absorbed poison; and moreover, has the same power of propagation or reproduction, as has smallpox or any other of the zymotic poisons; else how could be explained those fatal cases of inoculation which every now and then occur? As to its transmissibility, pyæmia producing pyæmia, I cannot speak, as I do not know that there are any cases on record.

A calomel purge was given him, and as he complained of so much pain the opium was increased as soon as he had an evacuation. He took pulv. opii gr. i., quin. sulph. grs. iss., made into pill; one every two hours. Iced lemonade and iced milk were given freely. He had no nausea, and ate whatever was given him. He was very anxious to have something left for him to make him sleep at night. To-day he was quite nervous and had an anxious look.

12th.—Slept better last night, but his general condition not improved: pulse 135; not hard as it was yesterday; had many stools, light colored, thin, not offensive. The left side of his nose and left upper eyelid were very much swollen; his head did not hurt him much. His joints were closely inspected, but with the exception of his left elbow, none of the larger joints were affected. This was swollen and painful. His hands and forearms were very much swollen, and an erysipelatous blush had spread over the dorsum of his feet, which were a little œdematous. On the right arm midway of its external aspect, a considerable quantity of matter had collected: a similar abscess was also found over the right fibula, and one at the lower part of the left calf near the fibrous expansion of the tendo-Achillis. Same treatment continued.

13th.—Patient disposed to wander; nose much swelled and left eye closed; a blush of inflammation extended down the right side of the nose. Numerous *pustules* had made their appearance over the chest, and a collection of matter was felt near the nipple: at numerous other points small abscesses could be felt. No irruption had occurred in the large joints, which were again carefully examined. Had many evacuations from the bowels, which were of typhoid character, and very offensive. General condition of the patient pretty much as yesterday. Treatment continued.

14th.—Always dozes after taking a pill, but wanders more than he did, and is constantly moving his hands about. His right eye is now closed and he can see no one, yet recognizes familiar voices, and speaks intelligently when addressed by name. A thin straw-colored secretion is running from his right nostril; his whole body is dotted with pustules, and several very large ones are to be seen about his neck. His nose is enormously swollen, and several erosions of the skin (which is very purple), have taken place on its left side,

permitting a view of the thick cheesy matter that distends the whole substance. There is some difficulty in swallowing, the fauces appearing to be involved. Pulse 135, and not so strong as yesterday; it is losing power; bowels very loose and discharges fœtid; skin gently moist; tongue furred and nervous. Urine liberal in quantity, high colored. He is very nervous and desires frequently to change his position.

15th.—He can scarcely swallow; the sides of his neck are swollen; his face is miserably disfigured by the swelling of his nose and eyes, which is increased by dark incrustations upon his upper lip from the secretions from his nose.

His pulse is quite feeble, and dark bullæ have made their appearance among the pustules: his bowels are still loose and the discharges fetid. Some of the abscesses have disappeared from under the integument, but others have made their appearance at different points. The tops of some of the pustules have been rubbed off, leaving hard red bases. On the morning of the 17th, two days after, the man died. Died of what?

May I be excused for expressing a doubt, and suggesting that the closing scenes of this case more closely resemble those of glanders than they do of pyæmia. I am inclined to this opinion upon this ground: that whilst there are no pathognomonic symptoms of pyæmia, yet there is a series of occurrences or events, which attend the pyæmic condition; and however variable this class of cases may be, yet one or more of these symptoms will generally be present, viz.: rigors, profuse sweats, an icterode appearance of the skin, rapid emaciation, rapid respiration. I have never seen a case of pyæmia in which all of these symptoms were absent. Now for the negative evidence: I have never seen a case of pyæmia that cropped out in pustules and affected the nasal cavities and the substance of the organ as in this case.

But there is a disease that does so affect the skin and the nose; it is glanders. Yet if we go into an analysis of this case, we shall not find those rigors, those *hideous, fœtid sweats*, the *ulcers*, the *gangrenous spots* and *hard tubercles* so particularly described by those who have observed the ravages of the disease in the human subject, and on which so much stress is laid, particularly the "*hideous, fœtid sweats.*"

If the case was one of glanders, the patient did not acquire the disease by inoculation (for I was careful in ascertaining that fact), but must have *inhaled* the poison. When? Where? There are glandered horses in the town, and have been ever since their introduction by the United States cavalry during the war;—it seems impossible to get rid of them. Abandoned horses, broken down by hard usage and disease, having a chronic running from one nostril, which nearly dries up at times and encourages hope of recovery, then suddenly relapses; these horses, mostly owned by negroes and undoubtedly affected with chronic glanders, are at this time of year

running at large over the common and public roads. It is just possible that he acquired the disease from one of these animals. If he was so affected, its approaches or early manifestations were very insidious and obscure. Undoubtedly he had a hæmorrhage in the calves of his legs, which, after a week of local distress and inflammation, was followed by constitutional symptoms and blood-poisoning—this sounds very much like the story of pyæmia.

Reports of Medical Societies.

VERMONT MEDICAL SOCIETY—SEMI-ANNUAL SESSION. REPORTED BY L. C. BUTLER, M.D., SECRETARY.

THE Vermont Medical Society held its semi-annual session at the Court House in Burlington, on Wednesday and Thursday, June 19th and 20th, 1867. The President being absent, the Society was called to order by Dr. H. D. Holton, Vice President.

The Board of Councillors met at 9 o'clock, A.M., June 19th. Upon recommendation of the Board, Drs. C. C. Smith of Gaysville, John Knowlton of Castleton, A. W. Styles of Sudbury, Chas. W. Peck of Brandon, and Wm. H. Giddings of Bakersfield, were elected members. By invitation, the members of the Society visited the Medical College at 11, A.M.

In the afternoon, papers were read as follows:—On *Pyæmia*, with cases, by Dr. S. T. Brooks, of St. Johnsbury. On *Chronic Diarrhœa*, by Dr. E. H. Pettengill, of Saxton's River; also one on *Foreign Bodies in the Air-Passages*, by the same. On *Septicæmia*, or *Blood-poisoning*, by Prof. Crosby, of the University of Vermont. The thanks of the Society were tendered to Dr. Crosby, and a copy of his paper requested for publication in their Transactions.

An address was then delivered by the Vice President of the Society, Dr. H. D. Holton, introducing as topics for contemplation, *Medical Education*, under which head, he suggested among other things, the need of some title which should indicate the standing of a scientific and regular physician, that of M.D. being adopted by irregular practitioners. He passed to the subject of *Criminal Abortion*, alluding to the alarming prevalence of the crime, to its dangerous consequences and effect on population; contrasting the small families of our native population with the larger ones of former times, and mentioning a district school, in the last generation, to which three families sent *thirty* children at one time, with a good reserve at home. He went on to consider the subject of *Insanity in Women*. This is commonly, consequent on uterine derangement. For these cases proper treatment is not commonly afforded by our hospitals for the insane. Excellent as they are, they are a step short of the demand. The risks of conducting proper examination, from the perverted imagination of the patient, were alluded to; and the propriety of having a board of consulting examiners for each hospital, to be called in at the discretion of the superintendent, was suggested. He hoped the Society would take action leading to the formation of such a board for the Vermont State Asylum.