ANTAGONISM OF PILOCARPIN AND MUSCARINE, OF ATROPIA AND ACONITIA, AS INFLUENCED BY TEMPERATURE OF THE SEASON, BY SYDNEY RINGER.¹

Dr. Ringer having noticed in October a different result in the study of the action of these drugs as opposed to each other upon the character of cardiac pulsations from the results of his observation during the preceding July, subjected some frogs to various temperatures during the succeeding winter, and tried the effects of a local application of the drugs upon the muscular structure of their hearts, and concluded:—

(1.) The antagonism of pilocarpin and extract of muscaria on the frog's heart varies in different months.

(2.) In the summer months pilocarpin always strongly antagonizes extract of muscaria, but in the winter months there is often no antagonism, and even when it occurs it is generally slight.

(3.) This difference is due to temperature, for if in the winter months frogs are kept for several days at 60° F., the antagonism becomes well marked, and, indeed, as strong as in the summer months.

(4.) This seasonal difference in the antagonism of these two agents suggests that in summer and winter, respectively, there is a difference in the composition of the protoplasmic molecules of the cardiac structure of the frog's heart.

We must not, however, lose sight of the fact that in hibernating animals during hibernation the rapidity of absorption by imbibition may, and probably is, very much retarded in cold-blooded animals; therefore it is not impossible that Dr. Ringer's observations should be qualified by this factor, and by it the negative effects of the drugs might be explained. This is the more probable if we study in the same light the results of his observations on the antagonism of atropia and aconitia under the influence of temperature, for here he says, "that the antagonism is well marked in the warm months, and is absent in the ventricle (which is the larger mass of muscular tissue) in the cold months." Pantelejeff² finds that the "antagonism of atropine for quinine on the frog's heart is affected by the time of year. In summer frogs quinine arrests the heart in diastole, and atropia causes the heart at once to resume its pulsations. In winter frogs quinine arrests the heart much more slowly, whilst atropine, instead of obviating, actually increases this arrest." Perhaps this latter apparent exception to our criticism may be caused by the mechanical effects of the local application of a substance to the cardiac substance. It is hardly proper to compare this method of experimentation by local application of substances to a frog's heart with that of clinical experience, or to the more crucial experiments of a proper natural administration of medicinal substances to healthy, warm-blooded animals. Therefore without the slightest endeavor to detract from Dr. Ringer's experiments, a little skepticism may provoke a more extended experimentation. Physiological experiments with drugs used upon cold-blooded animals without clinical observation and comparison by the bedside should be mistrusted.

— Dr. H. Augustus Wilson has been appointed as attending surgeon to the Philadelphia Presbyterian Hospital in the place of Dr. De F. Willard, who lately resigned.

¹ The Journal of Physiology, vol. iii., No. 2.

² Lancet, July 31, 1880, p. 176.

Hospital Practice and Clinical Memoranda.

BOSTON CITY HOSPITAL.

CASES IN THE SERVICE OF DR. A. L. MASON.

REPORTED BY DR. WITHINGTON, HOUSE PHYSICIAN.

CHRONIC ULCER OF THE STOMACH; VENOUS THROMBOSIS; PULMONARY EMBOLISM; AUTOPSY.

JOHN S. aged twenty-eight, single, born in Ireland, a marble-polisher by trade, entered the hospital April 9th. He had been in good health till about a year before, when he began to feel weak and tired. Soon after he began to vomit after nearly every meal. The vomiting occurred usually about four hours after the ingestion of food, and was preceded by nausea and by a dull pain in the epigastrium. The vomitus was of a dark brown color. After a month or so the vomiting became less frequent, but the symptom continued until two months before admission, causing great pallor and emaciation. For the last six months he has been confined to bed. Though the vomiting has stopped, the pain still continues, and is of a dull character. Six weeks before entrance he had œdema of both legs, which after two weeks began to diminish, but returned a fortnight ago in the left leg. There has been slight palpitation of the heart with dyspnœa of late.

The patient's appearance was one of extreme anæmia; lips almost colorless. The left leg was œdematous throughout its whole extent, and was in marked contrast to the right one, which, like the rest of the body, was considerably emaciated.

Auscultation showed a moderate amount of œdema at the base of both lungs. A loud murmur in the first sound of heart in second left interspace; also heard to apex apparently anæmic; loud venous hum in the neck; no apparent enlargement of the liver or spleen; percussion tympanitic in abdomen, extending well over the hepatic region; the urine was pale, acid, without albumen; specific gravity 1010. Soon after entering patient vomited for the first time in two months; no blood in the vomitus.

Two or three days later the tympanitic resonance in the neighborhood of the stomach became more marked with considerable epigastric tenderness; the appetite was very poor. An examination of the blood was made and the average of four counts gave 1,127,500 red corpuscles to the cubic millimetre; the white corpuscles not increased.

April 14th he began to fail rapidly without any special symptoms, the heart sounds remaining of fair strength. During the night the breathing suddenly became rapid and labored. He tossed about trying to get his breath and died at 3.30 A. M., April 15th.

Autopsy, twelve hours after death. The heart was distended by rather fluid blood; very anæmic, with fatty degeneration marked in inter-ventricular septum and in papillary muscles; the lungs on section showed great œdema; at the secondary division of the pulmonary artery on the right, an embolus, dense and very adherent, wholly occluded the vessel at this point; left lung extremely œdematous throughout, with emboli in the smaller arteries; the stomach was enormously distended with undigested food; at the pyloric end was a crescent-shaped ulcer about three inches long, the middle of the crescent coming just behind the pyloric orifice.

The ulcer was deep with sharply defined, clean-cut, indurated border. It had pierced the muscular and serous coats of the stomach and gone into the pancreas, which was adherent to the stomach over the seat of the ulcer; it had also touched the upper edge of the liver; along the base of the ulcer were a few little vessels filled with thrombi; there was no stricture of the pylorus, which freely admitted two and a half fingers; the muscular coat at the pyloric end was hypertrophied; there was thrombosis of the left iliac vein extending as far down as the vein was followed; this thrombus also extended around into the right iliac vein and a short distance down that vessel. Spleen and liver not abnormal.

Remarks. In spite of the youth of this patient, the extreme emaciation and cachectic appearance, with the phlegmasia alba dolens, were suggestive of cancer. The tendency to coagulation of the blood in cachectic patients, especially in the subjects of tuberculosis and cancer, rarely in chlorosis, and quite independently of the puerperal condition, has often been remarked. Trousseau says: "In cases in which the absence of any appreciable tumor made me hesitate as to the nature of a disease of the stomach my doubts were removed, and I knew the disease to be cancerous, when phlegmasia alba dolens appeared in one of the limbs. So great, in my opinion, is the semeiotic value of phlegmasia in the cancerous cachexia, that I regard this phlegmasia as a sign of the cancerous diathesis as certain as sanguinolent effusion into the serous cavities."¹

INTERSTITIAL NEPHRITIS; PYELITIS; SUPPURATION OF RETRO-PERITONEAL GLANDS; AUTOPSY.

Alfred P., a French cook, aged forty-eight, entered the hospital April 27th. He had considered himself perfectly well until within three weeks, when he had had severe headache, dizziness, and vomiting. The vomiting has occurred soon after eating and has followed nearly every meal. A week previous to entrance epistaxis. Patient uses no liquor; temperature 100° F.; pulse 88.

The appearance of the patient is somewhat anæmic but he is in good flesh; no œdema; nothing abnormal heard in chest; urine pale; reaction alkaline; specific gravity, 1007; albumen one half per cent.; sediment contained pus and bladder epithelium with crystals of triple phosphate; no casts found.

April 28. The headache is relieved but he has vomited three times since entrance; no blood in vomitus; epigastric tenderness marked.

April 30th. Has vomited quite frequently; says milk never agreed with him even when diluted with lime-water; the epigastric pain has increased in intensity and spread down upon the abdomen where it is now very severe; he is unable to refer the pain to any particular spot; rubs his hands all over the abdomen but chiefly to the right of umbilicus; slight retraction of left testicle is noticed.

May 1. Vomitus dark-colored; no blood; a spontaneous dejection; suppression of urine since yesterday; says he feels a little better.

May 2. Suppression continues; abdominal pain still severe; is slightly delirious this morning; after sitting up in bed a few minutes he turned on to his side and died almost immediately. After death one and one half ounces of urine were withdrawn from the bladder.

¹ Trousseau's Clinical Medicine. Sydenham edition. Vol. v., pp. 288, 289.

Examination revealed nothing further than on the previous occasion.

Autopsy, twenty-eight hours after death. Pericardium adherent to the left ventricle; valves sufficient; slight atheroma of aorta; considerable hypertrophy of the left ventricle, also of the right; weight of heart twenty ounces; consistency and color good; slight interstitial myocarditis and slight fatty change in the papillary muscles; spleen weighed eight and three fourths ounces; old adhesions to diaphragm and neighboring organs; considerable increase of trabeculæ; splenic artery somewhat atheromatous in places; in separating the intestines a small amount of pus was found, which proceeded from the chain of glands at the right of the spine; kidneys both small, cortical portion reduced to a minimum; capsule quite adherent; on being stripped off it left an irregular surface; pelvis of left kidney injected; the mucous surface of both ureters uneven and covered with an abundance of pus which extended down into the bladder.

There was nothing in the lungs or brain to account for the sudden death.

Remarks. This case had been regarded as one of interstitial nephritis, but the increasing abdominal pain, dysuria, and retracted testicle pointed to calculous disease of the pelvis. The suppuration of the retro-peritoneal glands in connection with pyelitis is unusual, and the pain which resulted made the use of morphine, in doses of from one sixteenth to one eighth of a grain, necessary. No ill effects from this drug were apparent.

Recent French writers have reported cases of interstitial nephritis with sudden fatal termination, which appeared to be due to syncope without disease of the cardiac valves.

DIPHTHERIA.

CASE I. Henrietta F., aged seventeen, table girl, entered hospital April 30th. Has had sore throat for three days, constantly growing worse. Marked dysphagia, chills, headache, almost complete aphonia.

Both tonsils much swollen, encroaching considerably on passage of fauces; both tonsils covered with dark brownish membrane over their whole surface. [Patient has been having throat painted.] Temperature 103.2° F. Pulse 120.

She was put at once upon the following treatment (adapted from Guttman):—

Ry Pilocarpin nitrat.	2 gr.
Pepsin	gr. iiss.
Acid. hydrochlor. dil.	gtt. iii.
Aquæ	ad Oss.

Give half an ounce every hour. Immediately after each dose of this medicine to have half an ounce of sherry. Throat atomized every two hours with glycerine and lime water equal parts. An ice-bag about throat. Cracked ice *ad libitum*. To be fed every two hours with liquid food.

May 1st. Right tonsil as before. Left tonsil is more swollen, and the membrane upon it has extended upwards; is not stained as it was yesterday. Patient passed a comfortable night, and the pulse is of good quality. As the ice-bag makes her feel chilly a poultice is substituted. The former medicine is continued, with the addition of twenty minims of chloride of iron every three hours.

May 2d. Right tonsil still enlarged, but membrane has come off, leaving only a spot as large as a split pea at the top. On the left tonsil the membrane is

very extensive, running down as far as can be seen. At the upper half it is black, and there is a well-defined line of demarkation all around it. Patient thinks she has expectorated more in the last two days than before. No sweating. Pulse good.

May 3d. The membrane noted yesterday on left tonsil has much diminished from the periphery on all sides. No new deposit. No diminution in size of tonsil. Odor of breath still remains foul. Some enlargement and tenderness externally at the angle of the jaw. Pulse 90, of good strength. Appetite small; patient comfortable.

Patient is not wakened at night for her medicine; she takes it probably eighteen to twenty times in the twenty-four hours. Each dose contains a little more than one twenty-fourth of a grain of pilocarpin, so that she averages about five sixths of a grain in the twenty-four hours.

May 4th. Right tonsil clear, except for one spot the size of a pin-head. Left tonsil has irregular pieces scattered over it, less in amount than yesterday. At the bottom of the tonsil is the largest piece, about the size of a pea. P. M. The membrane on the left tonsil has increased since morning, and extends as far down as can be seen.

May 5th. Left tonsil has cleared off very largely during the night; there remain only a few spots scattered over it. A small deposit on the left side of uvula. Pilocarpin omitted. Sherry reduced to half an ounce every three hours. Iron reduced to three times a day. Poultice about neck omitted. Atomizing continued.

May 6th. Tonsils clear. Atomization omitted. Sherry stopped. Allowed to have her clothes.

May 8th. About her room, much improved.

May 9th. Throat remains clear. Right tonsil still enlarged; patient says it is habitually so. Discharged, well.

CASE II. Edward T., aged nineteen, negro, entered the hospital on May 19th, the fifth day of his disease, which had been constantly increasing in severity. He had had all the usual symptoms of diphtheria, including swelling of the glands about the angle of the jaw. No discharge from the nose. Anorexia. Coated tongue. No vomiting. On examination the next morning both tonsils were found much swollen and covered with a dirty, grayish, sloughing membrane, the extent of which was very great. The opposing surfaces of the tonsils met, and with the uvula (which was enlarged and had a white patch) nearly closed the passage of the fauces. The pharynx could hardly be seen. Odor very offensive. Great tenderness at each angle of jaw.

The patient was put on treatment nearly identical with that in the previous case.

May 21st. The membrane has disappeared a little from the sides on the right tonsil, but in a vertical direction is as extensive as before. Left tonsil not much changed. The swelling is less on each side, and the passage of the fauces freer. Membrane seen on pharynx. In the afternoon the pulse remains good. There has been some sweating and somewhat increased expectation.

May 22d. Uvula very oedematous; no deposit on it. No change in membrane on the tonsils, except that that on the right looks more dirty and sloughing. A thick deposit on the posterior wall of pharynx. Patient says that last evening something burst on left side of throat, discharging chiefly blood. No sign can be

seen to-day of an abscess, on account of the great amount of irregular membranous deposit.

May 23d. Right tonsil much clearer; left still has a good deal of sloughy membrane. At lower part of left tonsil there is a swelling distinct from the rest of the tonsil, about the size of a cherry. Oedema of uvula as before, with a few patches on it. Does not sweat very much. Expectoration very free. On this account, together with a slight weakening of the pulse, the pilocarpin was omitted at night. Other treatment continued.

May 24th. Pulse strong. Glands at the angle of jaw much diminished. Exudation on tonsils and uvula much less. Still considerable swelling of left tonsil and uvula. Patient swallows well, though he reports regurgitation through the nose several times yesterday. Pilocarpin not resumed. Sherry changed to whisky. Poultice to neck omitted.

May 25th. Looks much brighter. Speaks more distinctly. Swallows readily. Swelling diminished. The lower anterior part of left tonsil is quite free, but the remainder is still well covered, and a thin deposit extends forwards upon the anterior palatine arch. Uvula as before, but smaller. Right tonsil has rather a larger area of membrane to-day, but it is thin. All the membrane is smoother and lighter colored than before.

May 26th. There remains behind the uvula at left side a small area of dark-colored, thick, uneven membrane. The rest of the pharynx is clear. Tonsils and uvula have thin white deposits as yesterday. Patient looks bright. Whisky reduced to half an ounce every three hours.

May 28th. Hardly any swelling remains. The parts which had membrane are nearly clear, with only a thin deposit in spots, around which the mucous membrane looks red and healthy.

May 30th. General condition very good. Patches on tonsils and uvula faintly visible.

June 3d. Membrane has wholly gone. Tonsils still look ragged. Patient up and about.

June 6th. Discharged, well.

CASES III and IV. Two other mild but undoubted cases of diphtheria were treated by pilocarpin in the same manner.

The first, Mary L., twenty-one, single, entered on the fourth day of the disease, May 26, with membrane upon both tonsils, of which the right was much enlarged. She had herpes labialis, and also three peculiar spots of herpes of size varying from a ten-cent piece to a quarter on the left side of the neck. She was put at once on the treatment. The next day the left tonsil was nearly clear of membrane, though considerably excavated. Right tonsil as before. The pilocarpin was continued without any depressing effect on the pulse till June 1st. The membrane on the right tonsil gradually melted away from the periphery, and later from spots in the centre of the deposit, until June 4th, when it had substantially disappeared, and the patient sat up.

Bella McA., aged nineteen, single, entered with a fading eruption of measles, which had appeared five days before, and with a sore throat of four days' duration. There was at that time a fringe of membrane all about the edge of the uvula, with a thin deposit on the anterior palatine arch. The next day, May 28th, the uvula was more swollen. The deposit had increased, involving the bottom of the left tonsil (size of a pea);

also the right posterior pillar of the fauces, whence it extended a little upon the right tonsil.

In the next two days this membrane diminished, and on June 1st the uvula and tonsils were clear, but there was a patch of the size of a pea on the posterior wall of the pharynx behind the uvula. Two days later the throat was entirely clear. In this case the pilocarpin was given till May 31, then omitted, but resumed the next day on the appearance of membrane in the pharynx, and finally discontinued June 3d, when this last deposit had disappeared.

CASE V. Jennie H., aged four, an inmate of the Pine Street Home, entered the hospital May 16th, with scarlet fever, of which there had been a number of cases in that institution recently. As the eruption faded she failed to improve in a corresponding measure. The temperature remained elevated, and she was restless and fretful, especially at night. The urine revealed nothing abnormal.

May 19th. There was moderate enlargement of the glands at the angle of the jaw, with some tenderness. The throat was reddened, but no membrane could be discovered, and the voice was clear. There began to be a thick and very abundant discharge from the nostrils. Moderate amount of cough. Physical signs in the chest of bronchitis. Vomiting from time to time.

Almost daily examination for the next few days failed to reveal any membrane in the throat. The symptoms continued without amelioration.

May 25th the swelling of the glands had become extreme, and extended backwards behind the sterno-mastoid, especially on the left side. The discharge from the nose still continued abundant and offensive. Inspiration was free, but expiration was interrupted, causing a sound like grunting. Both tonsils were enlarged, but no membrane was visible.

May 26th. For the first time membrane was visible, the posterior pharynx was covered with a dirty deposit; none on the tonsils, which were enlarged and reddened; swelling of neck considerable, especially behind the sterno-mastoid; no difficulty in swallowing; voice clear; tongue slightly coated; pulse 140, and of fair strength.

In addition to the treatment, which had hitherto been mainly expectant, the throat was sprayed with lime-water every two hours. She was given sherry, one half drachm, every hour.

In the next three or four days the glandular swelling subsided; otherwise the symptoms remained unchanged; a good deal of membrane was visible; the odor was not so offensive. The throat was cleansed once or twice a day by placing the child on the side while a stream of water from a fountain syringe was conducted back into the fauces on the upper side of the mouth, and allowed to run out on the lower side. The nares were also syringed. Both of these measures brought away a considerable amount of nasty mucus, but no membrane. The amount of stimulant was varied with the pulse and general condition, at one time being a drachm of sherry every hour.

May 30th. A sharp attack of conjunctivitis came on in each eye, which subsided after two or three days, the eyes being kept well washed with warm water.

June 3d. The child maintains fair strength, though it eats but little; the nasal discharge remains profuse; less membrane is visible than a few days ago.

June 4th. A ragged aperture, as large as a silver five-cent piece, is seen about a quarter inch outside the edge of the right pillar of the fauces; this perfora-

tion extends through, apparently, into the pharynx; the walls of the opening have a sloughy character; the spot now occupied by this orifice in the soft palate yesterday presented no peculiar appearance, so that it seems probable that the perforation occurred from behind forward. The child was now given five drops of the tincture of the chloride of iron every three hours with twenty drops of brandy every hour instead of the sherry. There is no longer any vomiting, but there is reluctance to take any food or medicine or to be disturbed.

June 7th. For the last day or two the patient has looked a little brighter; the pulse is feeble but the child's strength seems fair; the nasal discharge is much diminished; the perforation before noted on the soft palate is now more ragged and sloughy, and there are two small foramina visible outside the left palatine arch, where the mucous membrane looks soft and boggy; air enters the lungs freely, but râles are heard in the front of the chest on each side. The amount of brandy is increased to twenty-five drops every hour.

June 9th. The patient shows great aversion to swallowing, the iron is therefore reduced to five drops three times a day, but she is fed with a teaspoonful of milk every half hour. The perforations before noted on the left side of the soft palate have become blended into one large, ragged opening extending through to the pharynx. There is also an extension of the sloughing process on the right of the uvula.

The urine, which of late has been passed mostly upon the napkin so that no examination has been made for some time, is now retained, requiring the use of the catheter. When first examined the urine was normal, but is now of a specific gravity of 1010, pale, and contains a trace of albumen; the sediment consists of free blood corpuscles, considerable pus, and fine and coarsely granular casts with uric acid crystals. The catheter had to be resorted to a number of times after this.

June 10th. Alimentation by the mouth proving inadequate on account of the child's disinclination to swallow, she was put upon nutritive enemata three times a day in addition to what she could be induced to take by the stomach. The enemata were for the most part well retained.

June 12th. A foul-smelling discharge appears from both ears, which accordingly are syringed with warm water daily. The discharge from the nostrils has nearly ceased, but on giving the douche to the throat some of the water runs out at the nose bringing with it mucus tinged with blood. On inserting the tube to one nostril a large piece of membrane was washed out of the other side. This was the case with nearly every subsequent washing. The fluid as it ran from the mouth contained a large amount of viscid mucus of an offensive odor. The child's strength remains good.

June 14th. The temperature, which has been normal for a few days, is beginning to rise, and the child seems more fretful; pulse 140, of fair strength; a new deposit of membrane is seen on the left tonsil. The pilocarpin treatment was now begun, each dose containing one forty-eighth of a grain; brandy, two drachms, was added to each enema, with half a drachm by mouth every two hours.

June 15th. The spot of membrane seen yesterday has cleared off, but flakes are still removed in washing out the nostrils. The enemata are not well retained. She takes, however, half a drachm of brandy by mouth every hour.

June 16th. This morning she was much weaker, having passed rather a restless night; the pulse was faint; pilocarpin omitted; the discharge from the ears and nose continued fetid. She sank rapidly during the forenoon, and died at one o'clock P. M. Air entered the lungs freely to the last, and the cause of death was apparently exhaustion.

OFFICIAL BULLETINS OF THE PRESIDENT'S CASE.¹

EXECUTIVE MANSION,

WASHINGTON, D. C., August 22, 1881, 8.30 A. M. }

The President has not vomited since yesterday afternoon, and this morning has twice asked for and received a small quantity of fluid nourishment by the mouth. He slept more quietly during the night, and this morning his general condition is more encouraging than when the last bulletin was issued. Pulse 104, temperature 98.4°, respiration 18.

12.30 P. M. The President has continued this morning to retain liquid nourishment taken by the mouth as well as by enema. There has been no recurrence of the vomiting and no nausea. The parotid swelling is not materially smaller, but continues painless. It has caused for a day or two an annoying accumulation of viscid mucus in the back of the mouth, but this symptom has now much abated. At present his pulse is 104, temperature 98.4°, respiration 18.

6.30 P. M. The President has continued to take nourishment in small quantities at stated intervals during the entire day, and has had no return of nausea or vomiting. The nutrient enemata are also retained. The wound is looking well, and the work of repair is going on in all portions exposed to view. The pus discharged is healthy. At present his pulse is 110, temperature 100.1°, respiration 19.

EXECUTIVE MANSION,

WASHINGTON, D. C., August 23, 1881, 8.30 A. M. }

The President slept the greater part of the night, but awoke at frequent intervals. He has taken since last evening a larger quantity of liquid food by the mouth than in the corresponding hours of any day during the past week. The use of nutrient enemata is continued at longer intervals. The parotid swelling is unchanged. Pulse 100, temperature 98.4°, respiration 18.

12.30 P. M. The President continues to take by the mouth and retain an increased quantity of liquid food. At the morning dressing the wound looked well, and the pus was of a healthy character. The mucus accumulations in the back of the mouth on account of the parotid swelling are less viscid, and now give but little trouble. At present his pulse is 104, temperature 98.9°, respiration 18.

6.30 P. M. The President has continued to take liquid food by the mouth at regular intervals during the day, and has had no recurrence of gastric disorder. The parotid swelling remains unchanged. In other respects the symptoms show some improvement over his condition yesterday afternoon. Pulse 104, temperature 99.2°, respiration 19.

To LOWELL, Minister, London:—

The President's condition is more encouraging than it was at this time last night. During the last twenty-four hours he has swallowed ten ounces extract of beef and eighteen ounces of milk, retaining and digesting both. He has twice asked for food, which he has not done before for several days. Pulse and temperature are both somewhat lower. The swelling of the parotid gland has not specially changed. Its long continuance at present stage increases the fear of suppuration. At this hour (11 o'clock) the physicians report that the President has rested quietly the entire evening.

BLAINE, Secretary.

WASHINGTON, D. C., August 24, 1881.

To DR. D. HAYES AGNEW, Philadelphia, Pa.:—

Subject of removal of President from the White House is being seriously considered. We desire your immediate presence. Answer.

D. W. BLISS.

8.30 A. M. The President passed a very good night, awaking at longer intervals than during several nights past. He continues to take liquid food by the mouth with more relish, and in such quantity that the enemata will be suspended for the present. No change has yet been observed in the parotid swelling. The other symptoms are quite as favorable as yesterday. Pulse 100, temperature 98.5°, respiration 17.

12.30 P. M. The President continues to take liquid food by

¹ Concluded from page 299.

the mouth as reported in the last bulletin. His temperature has risen slightly since that time. In other respects his condition is about the same. Pulse 104, temperature 99.2°, respiration 17.

6.30 P. M. Shortly after the noon bulletin was issued an incision was made into the swelling on the right side of the President's face for the purpose of relieving the tension of the swollen parotid gland, and of giving vent to pus, a small quantity of which was evacuated. He has taken a larger quantity of liquid food by the mouth to-day than yesterday, and has been entirely free from nausea. His temperature this afternoon is however, higher than yesterday at the same hour, and his pulse somewhat more frequent. Pulse 108, temperature 100.7°, respiration 19.

To LOWELL, Minister, London:—

The President has not gained to-day. He has had a higher fever than is usual with his febrile rise. In the afternoon an incision was made in the swollen parotid gland by Dr. Hamilton. The flow of pus therefrom was small. The one favorable symptom of his swallowing liquid food with apparent relish, and digestion has continued, but the general feeling up to midnight is one of increased anxiety.

BLAINE, Secretary.

EXECUTIVE MANSION,

WASHINGTON, D. C., August 25, 1881, 8.30 A. M. }

The President slept most of the night. He has taken liquid food by the mouth at stated intervals and in sufficient quantity, so that the enemata have not been renewed. No modification of the parotid swelling has yet been observed. His general condition is much the same as at this time yesterday. Pulse 106, temperature 98.5°, respiration 18.

9.15 A. M. The subject of the removal of the President from Washington at the present time was earnestly considered by us last night and again this morning. After mature deliberation the conclusion was arrived at by the majority that it would not now be prudent, although all agree that it will be very desirable at the earliest time at which his condition may warrant it. We are, moreover, unanimously of the opinion that at no time since the injury has the President exhibited any symptoms of malaria.

12.30 P. M. Since the issue of this morning's bulletin a rise in the President's temperature similar to that which occurred yesterday morning has been observed. His pulse is somewhat more frequent. From the incision in the parotid swelling a few drops of pus were discharged this morning. The size of the swelling has not diminished. In other respects his condition has not perceptibly changed. Pulse 112, temperature 99.2, respiration 19.

6.30 P. M. There has been little change in the President's condition since the noon bulletin was issued. The frequency of his pulse is now the same as then. His temperature has risen somewhat, but is not so high as yesterday evening. There has been a slight discharge of pus during the day from the incision in the parotid swelling, but it is not diminished in size. No unfavorable change has been observed in the condition of the wound. He has taken by the mouth a sufficient supply of liquid food. At present his pulse is 112, temperature 99.8°, respiration 19.

To LOWELL, Minister, London:—

The President has lost ground to-day. Some of his symptoms this afternoon and evening are of the gravest character. The condition of the swollen gland and of the pulse and temperature suggest serious and alarming complications. His mind at intervals has been somewhat beclouded and wandering. His strength fails, but he still swallows liquid food of a nourishing character, and apparently digests it. On this one fact rests the hope that is still left of a reaction.

BLAINE, Secretary.

EXECUTIVE MANSION,

WASHINGTON, D. C., August 26, 1881, 8.30 A. M. }

The President slept most of the night, awakening at intervals of half an hour to an hour. On first awakening there was, as there has been for several nights past, some mental confusion, which disappeared when he was fully roused, and occasionally he muttered in his sleep. These symptoms have abated this morning, as on previous days. At present his temperature is slightly above the normal, and his pulse a little more frequent than yesterday morning. Pulse 108, temperature 99.1°, respiration 17.

12.30 P. M. At the morning dressing of the President it was observed that pus from the parotid swelling had found its way spontaneously into his right external auditory meatus, through which it was discharging. Some pus was also discharging through the incision made into the swelling. His wound looks as well as it has done for some time past. His pulse and tem-