

FINAL

REPORT

OF THE
LOUISIANA
PURCHASE
EXPOSITION



MEDICAL
DEPARTMENT



THE EMERGENCY HOSPITAL ON THE MODEL STREET

REPORT OF THE

MEDICAL DEPARTMENT

OF THE

UNIVERSAL EXPOSITION

OF

1904

BY

LEONIDAS H. LAIDLEY, M.D.
Medical Director

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ST. LOUIS

LOUISIANA PURCHASE EXPOSITION COMPANY

1905

Roster

MEDICAL DIRECTOR: Dr. Leonidas H. Laidley, Jan. 15, 1902, to Jan. 1, 1905.

ATTENDING SURGEONS: Dr. Josiah G. Moore, surgeon in charge,
Emergency Hospital, July 1, 1902, to Dec. 12, 1904;
Dr. M. E. Sheets, April 15, 1903, continued in service;
Dr. Otto A. Wall, March 31, 1904, to Dec. 1, 1904;
Dr. Clyn Smith, April 20, 1904, to Dec. 1, 1904;
Dr. W. S. Lawrence, Jan. 4, 1904, to Feb. 3, 1904.

VISITING PHYSICIAN: Dr. Luther P. Walbridge, Nov. 15, 1902, to Dec. 15, 1904.

BACTERIOLOGIST: Dr. Carl Fisch, July 20, 1904, to Dec. 1, 1904.

SANITARY OFFICER: Dr. James M. Gassaway, lieutenant-colonel, Marine
Hospital Service, June 14, 1904, to Dec. 1, 1904.

NURSE SUPER.: Louise Krauss, April 21, 1904, to Dec. 1, 1904.
(Superintendent Lutheran Hospital six years.)

NURSES: Madeline Epperson, April 30, 1904 to Dec. 1, 1904
(Protestant Hospital Training School for Nurses)
Margareta Lundberg. May 10, 1904, to Nov. 15, 1904
(Medical Department Pennsylvania University
Training School for Nurses);
Sciota Horn. April 29, 1904 to Dec. 1, 1904
(Lutheran Hospital Training School for Nurses)
Amelia Napier. October 4, 1904 to Nov. 13, 1904
(St. Louis Training School for Nurses)
Cuma Jett. April 30, 1904, to Aug. 20, 1904
(Protestant Hospital Training School for Nurses)
Janet Mitchell Aug. 21, 1904 to Oct. 4, 1904
(Maternity Hospital, New York).

AMBULANCE SUPER.: David Stewart, Dec. 1, 1903, to Oct. 31, 1904.

AMBULANCE SURGEON: Dr. George E. Adams, Aug. 12, 1904, to Sept. 30, 1904
Dr. Ned O. Lewis, March 27, 1904, to Aug. 12, 1904;
Dr. Henry M. DeMenil. April 30, 1904, to Nov. 15, 1904.

SANITARY EXPERT: Dr. George W. Dumphy.

SANITARY INSPECTOR: M. T. Sweeney. Feb. 1, 1903, to Feb. 28, 1903.

WATCHMEN: H. D. McIver. Nov. 8, 1903 to Aug. 12, 1904.

AMBULANCE DRIVERS: James Cummings. Feb. 19, 1903 to Dec. 31, 1904;
George W. Kemper. April 28, 1904, to July 31, 1904;
Charles U. Kennedy, Sept. 1, 1904, to Nov. 15, 1904.

MESSENGER: Robert E. Laidley. May 10, 1904 to Dec. 1, 1904.

RECORDING CLERKS: R. G. Hall. Nov. 10, 1903, continued in service.
Eugene Barrymore. April 23, 1904, to Dec. 1, 1904.

STENOGRAPHER: Neilie Grogan. Jan. 16, 1902 to Dec. 1, 1904.

Organization

The Chief of the Medical Department received his appointment January 13, 1902, with instructions to report to the Committee on Sanitation. At a meeting held to formulate plans for the organization of this department, the following general arrangement was made and approved: The title of the Chief Medical Officer should be "Medical Director," the appointment having already been accepted. The Medical Director shall have authority to appoint, subject to the approval of the Committee on Sanitation, such assistants as he may deem necessary for efficiency in organization and for the prosecution of the work.

The duties of the Medical Director were thus formulated: To organize a Medical Department having jurisdiction over all cases of personal injury in the line of duty; to assume the care of the resident population and visitors, and of such other cases as the Exposition Company might be responsible for, or which in their judgment should be cared for; to exercise a supervision over all sanitary and hygienic matters connected with the grounds and buildings and overall matters pertaining to the health and physical well-being of the employees engaged in the conduct of the Exposition.

A temporary hospital was opened in the Athletic Club House, which had been fitted up for the care of patients, two wings, offices, and examination and operating rooms were constructed, thus making reasonable provision for the care of the sick and injured. The Medical Director, after the preliminary work in organization had been effected, was instructed to report to the president all matters pertaining to this department.

At the end of the month, a full report was rendered both to the president and to the chairman of the Sanitary Committee. Blank vouchers, payrolls and other stationery were furnished for future use. All orders for supplies were sent to the president, and were forwarded by him to the committee on supplies to be furnished.

In the selection of my staff, I gave preference to those who had hospital experience for one or more years, and likewise selected those who did clerical work from those who had army experience, and found them well trained and willing help.

The large resident population, many of whom lived in tents, with a huge force of workmen, called for resident surgeons, who spent their time in the hospital, and one visiting physician, who cared for the sick in the camps and temporary buildings.

No one was employed in any department who would not give all his time and attention to the care of the sick and injured. The hospital service was placed under the care of the senior surgeon, to whom all should answer in the absence of the Medical Director.

A full report was kept of each case brought to the hospital, both as to its medical character and the circumstances attending the injury which might have any bearing on liability as it affected the corporation. Early in the construction period, an inspector was sent to our aid from the Engineers' Department, and he reported daily any insanitary condition within the grounds.

Buildings

The temporary hospital contained one ward, with six cots and eight wicker lounges, a drug room, an operating and examination room, diet kitchen and sterilizing room and office of the Medical Director. The active force on duty day and night began their work July 1, 1902, Dr. Josiah G. Moore being placed in charge of the hospital. Additional members of the staff were appointed as the necessity arose.

On January 7, 1904, the permanent Emergency Hospital was delivered to the Medical Director; it was situated at the east end of the grounds, making one of the group on the Model Street, accessible to the cars and surrounded by the park, one of the most desirable locations for the accommodation of all.

In arrangement, it was well adapted for its purpose; it was built of wood, and was two stories high; the lower floor was covered with granitoid. On this floor there were two wards, each containing twelve beds and six wicker couches; one ward was set apart for men and one for women. Two other rooms were constructed, one for isolation and the other for sunstrokes. The latter room was especially fitted up for emergency in case of a hot season, but was found to be useless as there was not one case of insolation to care for.

In the rear of the building were located the general operating room, the dressing room and the sterilizing room, all of which were fitted out with a complete hospital supply of the very latest and improved instruments used. I wish, in connection with this, to note that these were contributed without charge to the Exposition by the firm of Blee-Moore & Co., of this city; also all dressings and every need was furnished by them promptly and freely.

At the entrance, were located the offices of the Medical Director, the staff, an X-ray room, the superintendent of nurses, chief of sanitary department, storeroom, drug room, and diet kitchen; on the second floor were the dormitories for the staff, nurses and attendants. The kitchen was used to prepare meals for the attendants: and under the direction of the nurses, soups and various stimulating delicacies were prepared for the patients.

It was a rule to remove all patients from the hospital before 10 p.m., but in a few cases they were allowed to remain overnight owing to the inability to secure ambulance service from outside the grounds. I wish to acknowledge, in this connection, the prompt response with which the city department answered all the calls on them, not only with transportation but with willingness to care for all who sought aid at the public institutions.

Ambulance Service

An ambulance was placed at the service of this department at the beginning of the construction period. It was under the charge of David Stewart, who, during the exposition, became chief of the corps, and served in this capacity with eminent satisfaction, having had a number of years' experience in the Hospital Department of the Army. One ambulance was sufficient to care for all the calls and not until the dedication day was there any need for additional service.

On that day, the city placed two ambulances, three surgeons and five nurses at the disposal of the Medical Director; these were located at a sub-station in the Administration Building. One surgeon, with the two house surgeons at the temporary Emergency Hospital, and three nurses, with an additional ambulance, made the complement assigned to that point. In the Liberal Arts Building, where the exercises were held, a station was established under the charge of Dr. L. P. Walbridge, who was assisted by two nurses, a sufficient number of assistants to meet all demands on that occasion, where there were more in attendance than on a like exercise of any previous exposition.

During the presence of the greatest crowds, on and after the opening day, the two ambulances, well equipped and provided with a surgeon, a driver on duty constantly and a police officer, made up the complement that was able to meet all the demands of every occasion.

Great apprehension was felt lest we should not be able to care for the various occasions with large attendance but we were favorably disappointed in finding that, owing to the splendid care on the part of the guards and police officers on the spacious grounds, and owing to the sense of responsibility of the citizens of St. Louis endeavoring to make the Exposition not only the greatest, but the most orderly and desirable place for its people and their guests to visit, there was a smaller number to treat during the greatest attendance. This was noticeably so on Dedication Day, Opening Day, Saint Louis Day, President's Day, Missouri Day, Fourth of July and D. R. Francis Day.

The following rules were established for the government of the corps:

1. Two surgeons shall be on duty at the hospital, aided by one nurse in the operating room and one in the ward, their hours of service being from 8 a.m. until 3 p.m.; and a like number from 3 p.m. until 11 p.m.
2. One ambulance, with its attendant surgeon fully equipped for any emergency, and usually a metropolitan police officer shall be on duty constantly, subject to the call of the chief, who shall receive all messages and convey the same to his subordinates.
3. The commandant of the "Guards" instructed all his subordinates to aid in every possible way in caring for the sick and injured before the arrival of the surgeon and his aids, and in assisting in placing them properly for transportation in the speediest time.

4. Every consideration must be shown by all employees of the Exposition to the sick and injured, and under all circumstances the patient must be taken to the hospital in the shortest time possible.

5. No one shall be allowed to take the ambulance or wagons used by the visiting physicians off the grounds, except by permission of the Medical Director, and under no circumstances is any one allowed to ride in any of the wagons except those in their line of duty.

By the order of the President, approved by the Superintendent of the Division of Works, the Medical Department was given the right of way and by common consent this was agreed to by everyone on the grounds.

6. In every case a written report must be made to the medical director or to his representative, a copy of which is to be placed on file; likewise a more extended report shall be made by the representative of the accident insurance company with whom the corporation is insured. By so doing the legal right of the corporation may be protected.

7. The equipment of stretchers and appliances must be distributed over the grounds at such places as can be easily reached by guards and other employees near at hand; likewise all officers must be trained in their use.

Lastly, the strictest decorum and courtly attention must be given to all, avoiding noise, undue haste or any semblance of rudeness to those who come under your care. When any controversies arise they are to be referred to the chief of this department, or to his immediate representative.

LEONIDAS H. LAIDLEY
Medical Director.

Sanitation

The sanitary section was organized early in the work of this department. During the construction period Dr. L. P. Walbridge, in charge of the work of visiting the sick in the camps and also in inspecting the grounds, with the inspectors in the Engineers' Department, were able to report daily any unsanitary condition, which was ordered abated immediately. This duty devolved on the Chief of the Engineers' Department, Mr. Richard H. Phillips, and it is my pleasure to testify to his efficiency and promptness in discharging every duty. A number of camps were established on the grounds to accommodate the workmen and their friends, which required special regulations for their government.

The following order was issued in order to control the health of those residing within the grounds:

1. The Louisiana Purchase Exposition Company will furnish prompt and competent medical or surgical service without charge.

2. No one in the camps will be permitted to employ a physician not employed by the exposition company without the approval of the Medical Director.

3. Under no circumstances will a case of any contagious or infectious disease be permitted to remain on the grounds.

4. All cases of illness should be reported to the Emergency hospital, or, if the patient be unable to go to the hospital, report should be made to the sanitary inspector, who will see that the proper notice is given to the medical department.

L. H. LAIDLEY,
Medical Director

The above rules greatly aided in keeping the grounds under surveillance and aided the detection of any contagious disease. The disposition of garbage and waste from the camps elicited no little concern at first, but a police regulation compelled all to use the improvised water closets consisting of openings in the ground, well disinfected with sulphate of copper and chloride of lime, and garbage, was destroyed daily in a crematory established for that purpose.

The spring water found on the grounds was examined by Dr. Carl Fisch, bacteriologist, and was found to contain many colon bacilli. An order was issued forbidding everyone from using it under penalty of being driven from their camps. The city water was freely furnished by hauling until a connection with the city mains was established, furnishing comparatively pure water.

During the Exposition period, a supply of water was furnished by the special water mains and pipes furnished for sprinkling and general use, except for drinking purposes. Water for drinking was provided by the Exposition Water Company in machines and booths furnished for the purpose. This water was transported from DeSoto, Mo.; it was taken from an artesian well, which after most careful examination was found to be free from micro-organisms.

During the early part of the Exposition a long-felt want was met by the improvement of the water furnished by the city in the removal of all vegetable matter, leaving a clear and comparatively healthy water. The sewerage system provided by the Superintendent of the Division of Works was all that could be desired.

The garbage was collected every night and in part through the day, carted to the southwest part of the grounds, where it was cremated in a manner demonstrating all the new and well approved methods of caring for the refuse of a city.

In the appointment of James M. Gassoway, M.D., Lieutenant-Colonel. U. S. Marine Hospital Service as Sanitary Officer, June 14, 1904, began the final and efficient organization of the sanitary Department of the World's Fair. Dr. Gassoway made daily inspection of all parts of the grounds, reported all insanitary conditions to the President and issued a warning to all who might be responsible for insanitary conditions.

In dealing with concessionaires and those who were located on the "Pike," in order to avoid the trouble in other Expositions, a clause was inserted in every contract which

gave the Medical Department absolute authority to cancel their contract unless they obeyed the rules of this department.

I am happy to say that the extreme penalty was not resorted to and that the grounds, especially that part occupied by the livestock, were kept in a sanitary condition, as the following report from Chas. F. Mills, Superintendent of the Live Stock Department, will indicate:

In compliance with your request, I have the honor to report that the precautionary measures taken by the Exposition to insure the health and freedom from exposure to disease of the livestock exhibited at the World's Fair resulted in having the best of sanitary conditions provided.

The exhibit of livestock held in connection with the Exposition was the largest in point of numbers on record, and the displays came from all of the breeding districts of the world and over all the leading lines of transportation.

The various classes of livestock, including horses, cattle, sheep, swine, poultry, dogs, etc., in succession were on exhibition with short intervals during the heat, cold and storms incident to the season extending from Aug. 22 to Nov. 12. 1904.

The careful daily inspection revealed no evidence of any disease among the stock while on exhibition at the world's Fair, and the chief veterinarian gave all applicants a clean bill of health with permits for outgoing shipments of all classes of livestock.

The lavatory service was especially troublesome for a time, but with the use of scrubbing and the free use of kresols prepared by Parke, Davis & Co., bad odors and other difficulties were overcome. I wish to note the scientific manner in which this product was used by the sanitary expert during the summer months.

The question of contagious diseases being allowed to remain on the grounds was attended with great concern, especially on the arrival of strange people from every part of the earth. This was especially so of the Filipinos. On their arrival, a number of them had smallpox, one or more having died in transit. All persons who could not give a perfect bill of health were excluded from the grounds and those who remained on the grounds were vaccinated. This rule was adhered to without exception.

During the Exposition beriberi appeared; there were forty-five cases with three deaths. Not being familiar with this form of illness, there being little to learn from the literature on the subject, it caused great alarm on the part of the Fair officials and for a time it was a serious question whether the infected tribes should not be immediately returned to prevent its spread. Dr. Carl Fisch, the official bacteriologist, with Surgeon Gassaway, made their report prompting a delay for action in the matter. Dr. Hunt, who was in charge of the Igorrotes, contended that it was due to a faulty diet and that it was not communicable to those who were not similarly situated. The food as to quality and preparation was changed and immediately there was an improvement noted in most of the cases.

Dr. Fisch made postmortems on those that died demonstrating the character of the disease, as follows:

The observations that I have had an opportunity to make on a number of the cases of Beri-Beri occurring among the natives encamped on the Philippine Reservation have yielded nothing that would add to the knowledge so far obtained about the character or the etiology of this disease. The impression that clinical study, as well as the postmortem examination gave was, however, decidedly that of the effects of a chronic or more acute intoxication. The nature of the toxic substance could not be discovered, although the result of two autopsies very much suggested the presence of a chronic infection, analogous in its pathologic effects to those of, for instance, malaria or trypanosomiasis. Careful search in the blood and tissues (especially the spleen) for anything resembling parasitic organisms was negative. Cultures made from tissues taken at autopsy yielded only the ordinary forms. Guinea pigs, rats and rabbits injected subcutaneously and interperitoneally with cultures of spleen, and portions of various nerves from two cases coming to autopsy remained well and showed no symptoms of disease, except one rabbit, which died from a purulent (staphylococcus) peritonitis.

It cannot be decided, therefore, whether the intoxication is due to a toxic substance, or whether it is the product of a toxin forming parasite. The epidemiology of the disease certainly points to the latter conclusion ; this, too, is suggested by the variability of the clinical course that was observed, most cases being mild and chronic, and recovering, while others showed the pernicious form and ended life in a few days. As there is no reason to assume that a toxic agent could have been ingested by these patients, under the conditions under which they were kept (some cases seem to have developed primarily at the reservation), that would not have affected in the same way a greater number, the analogy with other infectious diseases presents itself.

Against a bacterial infection are to be adduced the findings at autopsy. The blood in both cases examined (Moro Pepion 7-28-1904 and Igorote 8-27-1904, the latter a case of fulminant disease) was found to be sterile even at autopsy. As before mentioned, cultures from the tissues yielded no results either. The histologic tissue changes were all of a character that would exclude the action of a bacterium in bringing about inflammatory reactions, although they to a degree resembled those, for instance, found after tetanus and hydrophobia. The pronounced enlargement of the spleen, with all the evidence of a chronic congestion, was the most characteristic finding. In both cases, although, of course, it is doubtful whether it was a consequence of the disease itself.

For the Igorote case, running a course of only a few days, other causes are more probable. The heart, in both cases, exhibited the picture of a chronic interstitial hepatitis. The neuritic processes were very marked in all cases examined, leading often to a complete degeneration of the fibers. They were more advanced in the Moro case, where secondary proliferation of the perineurium and endoneurium had taken place, while for the Igorote, the picture of a fresh degenerative change of the fibers obtained.

Hospital Records

The character of surgical and medical cases treated during the construction period afforded a fine field for surgery, especially the cases due to violence and to falls from great heights, which comprised a list of injuries of the thoracic, abdominal and pelvic viscera. The extremities likewise suffered to a great degree in fractures and dislocations.

In most cases in which death ensued there was found rupture of the stomach, liver or other of the vital organs, which with shock produced immediate or ultimate death. A number of workmen escaped fatal results after falling fifty feet or more, and in one case, during the local cyclone where eight persons were injured, one patient fell one hundred and twenty feet, suffering little injury.

The number of gunshot wounds were not very numerous, only one death resulting from that cause; fourteen perforations were found in this case, and death was caused by hemorrhage. One of the cases was of such importance at the time that I hope I may be pardoned in giving a short report of the same:

Patient - E. M, Aged 18, a visitor, of remarkably vigorous constitution and of unexceptional health, was shot in the abdomen during a brawl on the Pike at the Saint Louis World's Fair, June 18, 1904. He was admitted to the Emergency Hospital on the grounds, and within one hour an abdominal section was made.

Examination - It was found that the ball had passed through the abdominal wall near McBurney's point, passing inward and slightly downward. On examining the viscera, it was found that the ball had penetrated the cecum, making two openings, one in front and another behind, and had passed down into the soft parts lining the pelvis.

Treatment and Result - These openings were closed up by Lembert sutures, the abdomen was cleansed of large quantities of blood and escaping contents of the bowel, and the incision was closed with through-and-through sutures. The patient left the table within an hour under very favorable circumstances, the pulse being 72 and temperature normal. The next morning he complained of great pain in the hip joint, and was unable to move that limb. For ten days his condition was favorable, then he gave evidence of disturbance, especially about the joint. Chills and fever and increased pain suggested an examination with the X-ray, which would have been done earlier had we been provided with such an appliance. On July 11, an incision was made over the joint, disclosing the presence of pus outside of the joint, which was opened, showing that all of the head of the bone within the capsule was entirely destroyed and fractured; likewise the acetabulum also was fractured and necrosed. Following up the course of the bullet, the missile was found lodged in the upper and outer margin of the cavity of the socket and was removed. The necrosed portions of the bone were chiseled out, the dead portion of the head of the femur was removed, the cavity was curetted, packed with gauze, and thoroughly drained. The patient afterward showed evidences of sepsis, which prompted me, on July 22, to reopen the wound, wash out the cavity and introduce further drains. These are continually used up to the present time.

Subsequent History - About three weeks ago he manifested evidence of acute nephritis. On examination, it was found that he had a large quantity of albumin, with casts, evidently due to toxemia, as in scarlet fever. Since that time, by repeated cleansing of the cavity and thorough drainage, these evidences are disappearing, leaving him in a fair condition for recovery. The subsequent treatment will be to free the cavity and its surrounding structures of all suppuration, and by that means we hope to restore our patient to normal health, probably leaving him with a shortening of the limb, and perchance a degree of ankylosis.

At the time of writing, I am happy to report the recovery of the patient with only one inch shortening of the limb.

Summary of Cases at the Exposition

I hereby present a summary of the cases treated from the beginning of construction period to December 1, 1904:

	Pre	May	June	July	Aug	Sept	Oct	Nov	Total
New									
Surgical	3,412	499	515	467	489	472	388	284	6,526
Medical	2,736	436	815	815	740	884	728	392	7,381
Retreated									
Surgical	3,920	787	621	621	499	446	454	353	7,692
Medical	2,758	678	824	824	820	625	411	444	7,446
Total	12,758	2,400	2,663	2,727	2,548	2,437	1,981	1,473	29,045

New cases, construction period.....	6,148
New cases, exposition period.....	<u>7,750</u>
Total	13,907

Cases retreated, construction period	6,178
Cases retreated, exposition period.....	<u>8,400</u>
Total	15,138

Grand total **29,045**

DEATHS

Deaths from violence during construction period.....	11
Deaths from natural causes during construction period.....	<u>5</u>
Total	16

Deaths from violence during exposition period.....	12
Deaths from natural causes during exposition period.....	<u>12</u>
Total	24

Grand Total **40**

BIRTHS

Births during construction period.....	3
Deaths during exposition period	<u>4</u>
Total	7

AMBULANCE CALLS

The ambulance responded to the following number of calls:

May	168
June	172
July	210
August	224
September.....	253
October	191
November.....	<u>97</u>
Total	1,315

EXPENSES

Pre-exposition period	
Dec 6, 1901 to April 29, 2904.....	\$22,052.24
Exposition period	
April 30 to Dec 1, 1904	14,375.47
Postexposition period	
Dec. 2, 1904 to Feb, 15. 1905	<u>795.00</u>
Total	\$37,222.80

CLASSIFIED LIST OF CASES

	Construction Period	Exposition Period	Total
Abscess	110	170	280
Abortion	2	8	10
Adenitis	5	11	16
Alcoholism	12	32	44
Appendicitis	1	13	14
Arteriosclerosis	1	0	1
Asthma	3	10	18
Beriberi.....	0	45	45
Bronchitis	106	83	189
Burns	51	122	173
Common cold	476	201	677
Contagious diseases	43	33	76
Conjunctivitis	42	123	165
Dermatitis (poison Ivy)	27	10	37
Diseases of skin.....	43	138	181

Diarrhea.....	150	233	383
Dislocations.....	12	26	38
Dysentery	9	9	18
Enteritis	10	4	14
Epilepsy.....	18	32	50
Epistaxis.....	2	13	15
Exhaustion.....	12	225	237
Exhaustion (heat)	13	0	13
Fever, Intermittent.....	776	413	1,189
Fever, typhoid.....	16	7	23
Foreign bodies in eye	110	306	416
Fractures, compound	4	6	10
Fractures, Colles'.....	14	11	25
Fractures, Femur	3	5	8
Fractures, long bones	74	48	122
Fractures, miscellaneous	43	22	65
Fractures, skull	16	7	23
Fractures, spinal column	1	0	1
Frost bites.....	6	0	6
Gastritis	21	26	47
Heart disease	15	17	32
Hemoptysis.....	5	9	14
Hemorrhoids.....	16	16	32
Hernia.....	9	6	15
Hysteria	2	30	32
Indigestion.....	291	991	1,282
Insanity.....	2	6	8
La grippe.....	55	15	70
Laryngitis	15	5	20
Nephritis.....	2	10	12
Neuralgia.....	49	63	112
Otitis.....	15	33	48
Paralysis	2	0	2
Pharyngitis.....	19	116	135
Pleurisy.....	4	14	18
Pneumonia.....	7	6	8
Poisoning	3	9	12
Rheumatism, articular	56	91	147
Rheumatism, muscular.....	46	47	93
Sprains.....	263	222	485
Sunstroke.....	2	0	2
Syncope.....	17	136	153
Tonsillitis.....	115	92	207
Tuberculous.....	11	3	14
Ulcers (unclassified).....	16	5	21
Vertigo.....	16	7	23

Venereal diseases.....	21	11	32
Wounds, abraded	45	62	107
Wounds, contused.....	805	411	1,216
Wounds, incised	189	204	393
Wounds. Infected.....	282	349	681
Wounds, lacerated	487	414	901
Wounds, punctured.....	486	174	660
Wounds, scalp.....	185	102	287
Wounds, gunshot	0	18	18
Wounds, unclassified.....	5	16	21
Miscellaneous, surgical	137	491	628
Miscellaneous, medical.....	221	1,166	1,387
Totals	6,148	7,759	13,907
Retreated	6,678	8,460	15,138
Totals	12,826	16,219	29,045

In making this report I cannot fail to form conclusions concerning the work of this department of the Exposition; I believe that a permanent staff, including nurses, is the best, and that one well equipped hospital with an efficient ambulance service, without substations, is the most desirable and efficient in a work of this kind.