on the supplies which had been brought, and to make the best disposition possible of them.

At the time of arrival there were two Massachusetts regiments which were camped on the island, the 2d and the 9th. The 2d were stationed about two miles north of the city, and it was expected that they would be sent home within a short time. The 9th were camped on the hill at San Juan, and it was generally understood that their stay on the island was probably to be an extended one, which proved to be true. Since the 2d Massachusetts was expected to leave so soon, it had little need of the supplies of clothing, but required food for the sick, both for use in the camp, and on the transport on the way home. At this time some of the supplies, which had been previously sent by the transports *Harvard* and *Yale*, arrived in Santiago, and were taken in charge by the Association. No word was received of their arrival, but one lot was found on the wharf, where it had been unloaded from one of the lighters, and the second lot was found on board one of the large tugboats, to which it had been unloaded from the transport. Many of the boxes had been opened, but in general the shipments arrived in good order. Much of these supplies, as well as selections from the stores in the warehouse, were sent to the camp of this regiment, the selections being made with the probable short stay of the regiment on the island in view. Fortunately the orders to leave came within a few days, and these supplies were used on board the transport on the way home.

The 9th were in camp three miles from the city, on the San Juan Hill, and had the same general needs as the 2d, but transportation to this regiment was much more difficult, owing to the distance and the condition of the roads. Later in August, from the longer exposure to the hardships of the climate, they being the last to leave the island, their condition became such that the need of additional food for the men on duty and for special food for those sick in quarters was still more urgent. The majority of the regiment were using only the hardtack and coffee of the regular rations, and the whole regiment began to show the result of their continued stay on the island. Just before the regiment left for Montauk a shipment of supplies sent by the Association by Mr. Austin arrived, and in time for the use on the way home on the transport. This lot of supplies contained a large quantity of prepared food, condensed milk, etc., and proved to be most useful. At the same time soups and condensed milk could be bought at the commissary department, and a sufficient quantity was obtained to last until reaching Montauk.

During August there was but one hospital, the Nautical Club, in the city under cover, and to this the sick-est of the men were sent. It was found that there existed a scarcity at this hospital of hospital clothing, food and stimulants, and of any kind of delicacies for the convalescent. During the month of August frequent donations of these articles, as well as the alkaline waters, which fortunately could be bought in the city, were sent.

About the time when the last detachment of the 9th Regiment had left the island the representative of the Association was asked by General Wood to equip and take charge of a hospital in the city of Santiago. For this there was taken a building formerly built for and used as a hospital by the Cubans, called the "Centro Benefico," but which had been closed

for some months. There was some of the hospital furniture which could be used, but in general it was necessary to select, for supplies could be obtained from different sources throughout the city. Medicines at this time were hard to obtain, but finally were found by collecting from the various sources about the city, and special foods for the patients were collected from the various supplies, which later had begun to come into the city. At this time there was left among the stores a quantity of supplies which could be used as hospital furnishings, and much of this, especially clothing, was used to fill this need of the hospital.

CAMP WIKOFF, MONTAUK, L. I.¹

BY W. H. PRESCOTT, M.D., BOSTON.

I WENT to Montauk, August 15th, as agent of the Massachusetts Volunteer Aid Association, and "to establish a diet kitchen to provide delicacies for the Massachusetts regiments which were coming." I arrived at Camp Wikoff about a week after the first patient was admitted to the hospital, and stayed until there were only twenty patients left.

When I arrived I found a great deal of confusion — there were few physicians, fewer nurses, and fewer still hospital-corps men, and new tents or wards were being erected.

Among the other causes of confusion were: (1) the limited number of cots; (2) the difficulty in obtaining supplies (of all sorts); (3) the lack of an index of the patients; (4) the constant changes taking place among the patients; (5) the presence, in the wards, of "outsiders"; (6) the lack of any policing, and, finally, the absence of a firm, controlling hand always within reach. The surgeon in charge, Col. W. H. Forwood, to whom I applied for permission to erect a diet kitchen (without expense or trouble to the Government), did not consider one necessary, and it was nearly two weeks later when permission was given to Mrs. Valentine Mott, representing the Red Cross Society. Immediately after permission was obtained Mrs. Mary Hatch Willard, an expert dietitian sent by the Red Cross Auxiliary No. 3, and I, working in hearty co-operation, planned, erected and equipped a large diet kitchen with a floor space of over 2,000 square feet, and capable of providing the delicacies needed for 1,500 men. It was intended to show that food could be neatly and satisfactorily prepared in a kitchen in a field hospital, and it fulfilled its mission. In addition to the diet kitchen erected at the General Hospital there were similar kitchens (although smaller) provided for the three division hospitals, and additional equipments furnished to the one established at the Detention Hospital by Dr. L. A. C. Hughes and Miss Fennessey.

Almost the entire expense of the erection and equipment of these kitchens was borne by the Massachusetts Volunteer Aid Association, as well as the running expenses, until they were turned over to the Government, which had also borne part of the expense of their establishment. And it seems to me that it was only necessary for the outside "helping" societies to take the initiative, get a thing started, and then turn it over to the Government. In my experience, those in

¹ Read before the Boston Society for Medical Improvement, December 5, 1898.

authority were always glad of help, and willingly accepted the things turned over to them where their value had been established.

The camp was an ideal one, situated as it was at the eastern end of Long Island—not too far north nor too far south for the purposes for which it was started. It was intended for a quarantine camp for those soldiers coming from Cuba. If it had been farther north the cold would have affected the men much more seriously than did the air of Montauk; if it had been too far south the danger from the spread of yellow fever, if it once got started in the camp, would have been great. There must be sufficient room for 25,000 men. The water-supply must be good and abundant. This was provided by the two large ponds, into which the horses and mules could be driven, and a well forty feet deep provided water for the men. The water in the ponds was brackish but not harmful, that in the well laxative but otherwise all right. A large force pump was put into the well, which forced the water through two large sand filters and then to the different parts of the camp.

The water in the well, in my opinion, never became contaminated—surely not before the sand filters removed any danger from its use, even if it had become contaminated. I used the water all the time I was there and never suffered any inconvenience from it. The water pipe leading to the hospital broke a few days after my arrival, and the only water for drinking purposes during the following three days was the Hygeia and Apollinaris, which the Red Cross and Massachusetts Volunteer Aid Association furnished.

The physicians varied as to ability and character, as they do in every part of the country: some were good, some were poor, but the average was above that which you would find in any large city. One doctor ordered four quarts of whiskey for his ward, and the patients received one quart, while he kept the rest; he was removed the next day. Another suffered much from rheumatism, for which he took large doses of whiskey, and on that account was unable to do his work, so he was relieved. Another cut off the uvula of a patient suffering with diphtheria, that he might breathe more easily, and he was discharged. Another was frightened by finding a case, as he thought, of yellow fever and ran away. To raise the average we had three of the prominent men of the country: Drs. Naurede, of Ann Arbor, Senn, of Chicago, and Delafield, of New York.

The nursing was, on the whole, good. The majority of the female nurses, both the trained nurses and the Sisters of Charity, did their work conscientiously—perhaps the only criticism I would make of them was that they could not appreciate that the doctor was supreme in his ward. I cannot say as much for the male nurses, who came from the different parts of the country, and who found fault with everything instead of trying to make things better. Many of them stayed twenty-four hours or less, and it was a relief to the authorities to have them go. The hospital-corps men were for the most part untrained, and while they did as well as could be expected of them under the circumstances, it has seemed to me that there was a great mistake made in the manner of their enrollment, and that not enough inducements were offered to procure men qualified for such work.

There were five hospitals in all—the General, which at one time had a capacity of 1,800 beds, the

Detention, with about 400 beds, and three division hospitals, which had altogether about 450 beds. The Detention Hospital was in Detention Camp, and was the hospital to which all suspicious cases were sent. When I arrived, this hospital was under the care of a captain in the regular army,—a bright capable man,—but utterly unfit for his position, because he was under the influence of liquor a part of every day. He was removed and Major Ebert, who had won a name for bravery and ability at Santiago, was appointed, and again proved himself to be a man of exceptional ability. The General Hospital was under the direction of Major C. L. Heizman, who had as assistants Major I. C. Brown, Major L. B. Almy, and Major H. D. Thomason. All of these were men of ability and did their work carefully and thoroughly, but were handicapped by the lack of authority. The plan of the hospital was an excellent one, but there was a lack of executive ability in the man who had charge of its construction and general charge of all the hospitals. It has seemed to me that this was one of the "outs" of the camp, for there was needed great executive ability and the power to delegate authority to "the heads of departments." The surgeon in charge had to sign every order, and, as he was not (and of necessity could not be) always on hand, the work dragged and much confusion resulted. Another source of trouble was the absence of written orders and the liability of having orders countermanded almost as soon as they were issued. Another "out" was due to the fact that the Government did not use the water-way for the transportation of food and supplies.

The Long Island Railroad is a one-track road, and it could not take care of all the supplies and people which it was necessary to bring to Montauk. The management of the road is to be congratulated upon the splendid work done and the great ability shown, but in spite of all that could be done there were many vexatious delays and much hardship as the result. The Volunteer Aid Association, through the generosity of one of its members, was able to provide the tug *Alert*, which made bi-daily trips between New London and Montauk, thus making it possible for me to get the supplies sent at regular times (and on time), and also made it possible for me to procure things quickly when, for any reason, they were needed.

The means provided for the furloughing of the men were inadequate, especially at first, and there was suffering in consequence. But many distressing cases of men taken ill at the station and on the train were due to other causes. The men had come from Cuba, and their cerebation was slow and poor, and they could not be relied upon (I am speaking of those in the hospitals) to do what they were told. The physicians were slow to realize that this was so, and when a man had no rapidity of pulse, no elevation of temperature, and said he felt well, he was recommended for furlough. It takes some time for a furlough to be made out, especially if there are fifty to seventy of them and only a few clerks to do the work. The furlough was made out at the hospital, and then the men walked to the station, a distance of a mile and a half, through the dust and in the sun. When they arrived at the station their transportation and commutation of rations had to be made out at the Quartermaster's Department, which meant a farther walk of 300 yards (150 each way) through sand up to one's ankles. Of course it took a good deal of time to do

these things and by the time the train was ready to leave the men were tired out and some of them quite ill (their illness perhaps aggravated by a visit to the lunch counter and its pies). I saw many patients having severe chills in the barn-like waiting-room of the station, but it was seldom indeed that a man, no matter how ill he was, could be induced to return to the hospital. They were furloughed, and all you could do was to reason with them, and they could not understand any argument. They wanted to get home, and were near the train which was going towards their home, and nothing you could say would make them go back; not that they had been badly treated, but it was going away from home and they were going home. The quartermaster's office was finally moved to a tent near the station, and the Red Cross opened a tent right across the way where the sick men could be taken care of before the train was ready to start.

Then the long railroad journey was trying at best and especially so when made in an ordinary car without comforts. Mr. Ernest McMillan, of New York, with the aid and co-operation of Mrs. Willard, provided a hospital car which he ran at his own expense until it was turned over to the Government. The car (an ordinary baggage one) was lined throughout with white oil-cloth, and cots and reclining chairs put in. A nurse and doctor went with the car on each trip, and all the medicines and nourishment needed were taken along. Mrs. Whitelaw Reid soon after sent two Wagner cars to be used in the same way, but even under these circumstances a dusty ride of four or seven hours is a strain upon a sick man. After the second or third week a "board of investigation" was appointed, which went around every morning and decided what patients were able to be sent away, and after that I do not know of any one who suffered material injury because of his being moved. When for any reason a very sick man had to be moved, the cot upon which he was lying was taken and put into an ambulance, driven to the station, and then put into the "hospital car" and sent along on the train, so there was no moving of the patient between the hospital at Montauk and the one to which he was sent. The nurses in the "hospital cars" kept a record of the temperatures, etc., of all the patients carried, which will be published at some future time.

A great deal of my time was spent in the distribution of the supplies sent by the Massachusetts Volunteer Aid Association to the 2d and 9th Massachusetts regiments, and to every regiment of regulars. In this work I was aided by Grafton Cushing, Esq., who rendered invaluable assistance, and who soon became known to every regiment as the distributor of Massachusetts benevolence.

There was distress at Camp Wikoff, some of which was relieved and more prevented by the various societies which had representatives there. A great deal of the distress was due to the lack of preparation and to the nature of case, but in spite of it all, in my opinion, the hospitals at Montauk became model field hospitals.

Complaint has been made that taps were not sounded, salutes fired, nor sufficient attention paid to the dead. As the cemetery was within one hundred yards of the hospital, the cruelty and danger of taps and salutes can be readily appreciated. On one day there were seventeen deaths, and if these ceremonies (proper and impressive though they be) had been performed I be-

lieve that fifty more men would have died among the 1,600 patients, then in the hospital, as a result.

In conclusion I wish to pay my tribute of praise to the regular soldier. I found him to be brave, uncomplaining, obedient to orders, above the average in intelligence. No matter where he may be put, the American soldier will be a credit to the nation and bring honor to himself.

GENERAL REPORT.¹

BY JAMES BOOTH-CLARKSON, M.D., BOSTON,
Medical Agent of the Massachusetts Volunteer Aid Association for Porto Rico.

THE Massachusetts hospital ship *Bay State* arrived at Ponce, Porto Rico, on Sunday, September 11th, but before anchoring was met by the port authorities with orders to go at once to Guanica for refuge from a hurricane signalled from Barbadoes. The ship had to go into the landlocked harbor of Guanica after dark and without a pilot, there being no other alternative, as, being near the land, and with only two days' coal on board, she could not have ridden out a hurricane at sea.

Next morning, September 12th, we went ashore to visit the camp of the First United States Engineers. This was one of the best if not the best camp seen in the island, as it had been intelligently selected, laid out, drained, and the discipline was similar to that of the regular army. Discipline had evidently been a successful hygienic measure, as the health of the men was much better than that of the regiment preceding them, who had found the same site a swamp and had camped in it without seemingly improving it. At the request of Dr. Williams, the *Bay State's* medical staff visited the hospital, which was in very good order considering the circumstances. Dr. Williams had made arrangements for getting eggs, milk, chickens, etc., from the surrounding country, so there was comparative comfort, at the same time he was very glad of some medical and other supplies from the *Bay State*.

There were about 35 cases in hospital (which, after all, was a large number for a company post), most of which were stated to be analogous to the mountain fever of Florida and the Southern States, with perhaps more pronounced intestinal symptoms.

The cases were most satisfactorily treated with intestinal antiseptics, as spirits turpentine, listerine, salol, stimulants, turpentine stupes to redness, and quinine as a tonic. He (Dr. Williams) had not discovered, neither did the microscope, any cases of malaria. There seemed to be more care to prevent disease in this regiment than in others met with; for instance, the camp was well chosen as to site, was well drained; the mules were three-quarters of a mile inland from the camp, and the sinks a considerable distance from it towards the sea; all trees except a few large ones were cut down; there was a U-shaped trench around the whole camp, besides trenches round tents, which had wooden floors; the men were warned what to avoid, such as mangoes, pineapples, bananas; and orders had to be obeyed, as there was none of the "If I were you I would" about orders there. Water was carefully filtered. The men took two grains of quinine thrice daily, and were encouraged to take oranges, limes, sweet limes and lemons. They found the regi-

¹ Read before the Boston Society for Medical Improvement, December 5, 1898.