Chapter Thirteen Empire and Insurrection

dmiral George Dewey's victory over the Spanish fleet in Manila Bay was a decisive moment in American history. While the seizure of Manila was a valuable bargaining chip for the McKinley administration in its efforts to liberate Cuba, a secure port there forged another link in a chain of Pacific Islands leading to Asian trade markets. President William McKinley, however, was extremely hesitant to commit the nation to a policy of annexation, and this led to ambiguous and confusing directives from the White House. American authority would be absolute in protecting the people of Manila and their property and individual rights, assisting in resuming trade, and ensuring local laws were upheld; but no recognition was to be extended to Emilio Aguinaldo's rebel government. Whether the expeditionary force was to subdue and secure only Manila or all of the Philippine Islands was never made clear. It was a situation that condemned Major General Wesley Merritt, commander of the Expeditionary Force to the Philippines, and his successor, Major General Elwell S. Otis, to a reactionary mission execution strategy.¹

The Expeditionary Force to the Philippines, the Eighth Army Corps, landed at Cavite and established Camp Dewey near the village of Tambo some four and a half miles south of Manila at the end of June. Merritt convinced the Spanish commander to surrender after a sham engagement to satisfy Spanish honor and keep the Filipinos from entering the city on August 13. This left an irate Filipino army in the surrounding suburbs. Clashes between U.S. forces and Filipinos began almost immediately. Merritt worked aggressively with Aguinaldo to diffuse an extremely explosive situation and get Washington to define its mission and specify rules of engagement for self-defense. To complicate matters, General Nelson A. Miles continued to limit the size, composition, and duties of the Eighth Corps. Tired, frustrated, and in ill health, Merritt asked to be relieved and was replaced by Otis at the end of August.²

On the other side of the globe in Paris, Spanish diplomats—without bargaining options—agreed to American terms for peace. The United States held Cuba in trust and put her on the road to independence, but Spain assumed the Cuban

war debt. Puerto Rico and Guam became American islands, and Spain ceded the entire Philippine archipelago to the United States for \$20 million. The Treaty of Paris, signed on December 10, ended hostilities with Spain and gave America a new colonial empire.

For Major General John R. Brooke, the new military governor of Cuba, and General Guy V. Henry, commander of the Department of Puerto Rico, instructions from the president were clear: the interests of the indigenous populations were paramount, administration was to be based on laws not military force, and the end stage was an environment that provided Cuba an independent government and a stable civil government on Puerto Rico. For Otis, the president's intent was not so obvious. McKinley and his advisors minimized the risk of war with Filipino nationalists and regarded a secure Manila as a sufficient start point for the expansion of U.S. sovereignty based on an overly optimistic and naive belief that once Filipinos experienced the benefits of the American way of life, annexation would be accepted and conflict would be avoided. Essentially, this was the president's benevolent assimilation policy, but little guidance for its implementation was forthcoming.³

Otis, a moody, undiplomatic, cantankerous, and parsimonious man, would become a much-maligned commander. However, he had the intellect to grasp the civil and military missions he had inherited and the managerial experience to see them accomplished. The first priority was to expand the American perimeter around the city. Otis, through the threat of violence rather than diplomacy, pushed Aguinaldo's Army of Liberation out of the suburbs. Although the Army of Liberation contested some areas now held by the Eighth Corps, Otis recognized he could only keep the peace by eliminating insurgents from Manila and, thereby, more easily implement McKinley's plan of benevolent assimilation. This larger task, centered upon cleaning up the city and maintaining the health and discipline of the soldiers, demanded a multidisciplinary approach for success. The provost marshal, Brigadier General Robert P. Hughes, employed three regiments and the engineer contingent to reestablish a police force, organize public works and sanitation programs with inspection teams, and create a public education system. A public health department was established under Hughes' command, and Henry Lippincott expanded medical services. The old Spanish hospital beyond the walls of Manila was refurbished and enlarged with tents to become the First Reserve Hospital with 800 beds. A female seminary was converted into the Second Reserve Hospital of 300 beds, and on Corregidor Island a Convalescent Hospital of 280 beds was established. The original hospital facilities in Cavite became a District Hospital for use by the regiment and smaller commands in that town. The Medical Department had ample funds and abundant supplies from the states as well as some procured locally and sufficient space for storage. Transportation for the sick and wounded was also more than adequate.4

As a new year dawned, the Medical Department faced challenges equal to—if not greater than—those of April 1898. Sternberg addressed these challenges from a position of strength and experience that he did not have before the war. With a budget exceeding \$2.7 million, he built and generously supplied and equipped

hospitals in both active theaters and in the continental United States. During the year, four general hospitals were established in the Philippines, four in Cuba, one in Puerto Rico, and one in Honolulu. Each of these hospitals, in conjunction with the regimental and departmental hospitals, was prepared to treat 15 percent of the command in-house and equipped to diagnose malaria, typhoid, and yellow fever by state-of-the-art methods. The hospital ships Relief and Missouri provided backup holding and treatment support, and the Army Transport Service, established in mid-November, guaranteed the safe evacuation of soldiers to the United States under the care of qualified physicians on well-supplied vessels designated for this purpose. Sternberg assigned Colonel Charles Greenleaf as medical inspector of the army and required a weekly sanitary report from all surgeons in the field and at temporary stations. Medical Department manpower remained a tenuous issue. Large numbers of contract surgeons and corpsmen, who had signed up for the duration of the war, would be leaving the service, and nurse's contracts also were being annulled. For the moment, however, no serious deficiencies threatened army healthcare.5

With this essential healthcare infrastructure in place and well funded, Sternberg evaluated the public health situations in the Pacific and the Caribbean. Public health—both for the soldiers and the civilian populations in America's new possessions—would play a major and interdependent role in accomplishing McKinley's goals. Ravaged by war and the departing Spanish armies, whatever public health infrastructure had existed on any of these islands was in a shambles. A board of health had already been established in Manila under the direction of Major and Surgeon Guy L. Edie. Edie, a laboratory student in the first class of the Army Medical School, and his staff would perform heroic work with little support from their commanding general. In Cuba and Puerto Rico, the modest services that had kept some municipal water clean and removed human and animal waste and garbage had been poorly administered by the Spanish and had come almost to a standstill since the Cuban rebellion. These filthy conditions had the potential to preclude McKinley's experiment in exporting democracy to the Caribbean and sicken thousands of the nonimmune regulars destined for the islands in the coming year with typhoid, dysentery, malaria, and yellow fever. Priority of effort went to the Caribbean.6

To prepare for occupying forces and obtain a broad understanding of existing public health conditions in Cuba and Puerto Rico, Sternberg directed medical officers to conduct inspections of hospitals and various towns where soldiers were to be quartered to determine their sanitary conditions and disease status and locate potential campsites should units need to move to escape disease. At the same time, he sent Lieutenant Colonel Robert M. O'Reilly to Jamaica to study British field sanitation techniques. The British experience there in reducing morbidity and mortality from all diseases over the past seven decades had been one of continued success. O'Reilly reported the British put a premium on landing healthy, well-disciplined, and appropriately clad soldiers after the end of the rainy season in November and quartering these unacclimated troops at stations located

at higher elevations. These stations had been cleared of underbrush, surface drains and earth-closet system latrines constructed, and clean water supplies established. Barracks were elevated over cement foundations, well ventilated, and not allowed to become overcrowded. Personal hygiene was a priority, and the introduction of the canteen, where soldiers could obtain beer, reduced drunkenness from spirituous liquors. O'Reilly included all of these tenets in some form in his report to Sternberg. Since American troops would not have the luxury of being acclimated, he recommended that "troops for service in Cuba should, as far as possible, be recruited from the Southern States, and a large proportion of these troops should be colored with white officers."

With this combined intelligence, Sternberg had sent recommendations to Adjutant General Henry Corbin at the end of December. The size of the occupation force should be no larger than necessary to accomplish the mission and composed predominantly of southern black soldiers or Cuban natives, as these soldiers were considered more likely to be immune to yellow fever. Unacclimated troops should not be stationed or even be allowed to visit vellow fever infected cities, and they should be on the islands and quartered in fixed barracks before the end of spring when the malaria and yellow fever seasons began. Sternberg included extracts from Circular No. 1 issued in April concerning sanitary precautions and was specific in his recommendations concerning fevers. "Every case of fever should receive prompt attention. If albumin is found in the urine of a patient with fever it should be considered suspicious [of yellow fever] and he should be placed in an isolated tent. The discharges of patients with fever should always be disinfected at once.... No doubt typhoid fever, camp diarrhea, and probably yellow fever are frequently communicated to soldiers in camp through the agency of flies, which swarm about fecal matter and filth of all kinds...and directly convey infectious material attached to their feet or contained in their excreta to food which is exposed.... Whenever a case of yellow fever occurs in camp the troops should be promptly moved to a fresh camping ground located a mile or more from the infected camp.... When cases of yellow fever occur in a camp or barracks under such circumstances as to indicate...the locality is infected the troops should at once be removed. The disastrous mistake has frequently been made of removing the sick and leaving the well in an infected locality."8

Sternberg's malaria chemoprophylaxis remained unchanged from the previous year, and he did not mention mosquito bars. Ronald Ross had completed his work describing avian *Plasmodium* species in May, sent Sternberg a copy of it the following month, and wrote him about further experimental results obtained in July and August 1898. He stated plainly: "I do not think that there is much probability in favour of infection by any other means than the bite of mosquitoes of the proper species, e.g. by air or drinking water.... My object in writing this letter may appear rather startling to you. It is to suggest the use of mosquito nets, when practicable for your troops in Cuba and elsewhere, where I understand they are suffering severely from malarial fever."

While these documents did not arrive early enough to preclude the summer fiasco in Cuba, Sternberg had read them prior to the post-war occupation. He, like many of Ross' British colleagues, remained skeptical of the mosquito's role in malaria transmission. Even Ross' mentor, Patrick Manson, believed the mosquito transmitted *Bancroftian filariasis* through water contamination and not through its bite. Sternberg still believed malaria was waterborne, and, if the mosquito was involved, it was because the insect deposited parasites in water that were later consumed by soldiers.¹⁰

Sternberg, accompanied by Captain Edward L. Munson, made an inspection tour of Havana in the second week of January. They met with Brooke at his headquarters in the Hotel Iglaterra located on Havana's main plaza, visited the army medical staff in the city, and toured the Alphonso XIII Hospital, now designated Military Hospital No. 1. The primary concern at this early stage of the occupation was for the continuing health of the incoming U.S. forces. The rainy season would begin in May, bringing with it an increased threat of yellow fever and malaria. Sternberg strenuously recommended to Brooke and his departmental commanders to expedite the cleaning and disinfection of identified barrack facilities so soldiers would be out of tents by that time. Otherwise, commanders would spend more time moving from one uninfected camp to another than assisting the Cubans with nation building. More pressing, however, was another outbreak of typhoid fever, this time in the garrisons scattered over the island. The 8th Infantry Regiment, camped at Quemados, six miles southwest of Havana, had brought typhoid fever with it from the United States; and regimental surgeon Albert E. Truby found his regimental hospital overrun with cases until Military Hospital No. 1 was ready for occupancy. Sternberg feared a repetition of the previous summer and urged a rapid refurbishing of Cuban hospitals for army use and the construction of new army hospitals in provincial towns where none existed.¹¹

As to the health of U.S. forces in the Philippines, Sternberg reported to the Senate on February 4 that the sick rate among the Eighth Corps, which had been as high as 17 percent, was now 10 percent, with the large majority of illnesses being only slight ailments. The comparatively large admission rate—3,016 per 1,000 soldiers¹²—was "due mainly to malarial diseases which are climatic and to diarrheal diseases which are no doubt in large part due to errors and irregularities of diet on the part of the affected individuals."¹³ Although venereal disease rates—82 per 1,000—slightly exceeded those in U.S. garrisons—and according to Sternberg most assuredly were underreported—respiratory ailments and overall injuries were far less. The mortality rate from July through October was 9.6 per 1,000 men, only a little more than what was seen in U.S. garrisons during peacetime. Typhoid and smallpox generated the highest death rates, but neither disease gained a substantial foothold within the regiments, and the malaria encountered proved to be nonfatal.¹⁴

The Philippine Expedition had been for the most part ignored by the American public. This was all about to change. Tensions created by the stalemated negotiations between Otis and Aguinaldo, as the latter attempted to maintain control of

his Army of Liberation and establish a viable government, came to a fever pitch in February. On the same day Sternberg sent the Eighth Corps health report to Congress, Filipino rebels launched a night attack in and around Manila. While the timing may have caught some of the officers and men momentarily off guard, the eruption of hostilities had been long anticipated. Firefights throughout the night varied from sporadic to desperate, and regimental command posts—situated to guard the most likely avenues of approach to the city—were precluded from supporting each other by distance and terrain. The uprising, however, was poorly coordinated in its execution. The defensive perimeter was held throughout the night. The following morning, Major General Arthur MacArthur counterattacked, securing Santa Mesa Ridge, and Anderson's First Division pushed the Filipinos out of the villages of Pasay and San Pedro. By the close of February 5, the largest and bloodiest battle of the Philippine Insurrection was over. One hundred ninety-four Americans had been wounded and 44 had been killed or died of wounds.¹⁵

The Medical Department again proved equal to its task. Lippincott reported to the surgeon general that the department had been "in fine condition from the moment of the first fire and continued to improve from day to day, so that there never was a delay in securing excellent attention for the wounded." His "division surgeons and medical officers of regiments were alert," and had prepared "for all emergencies.... Litters, [first aid] pouches, medical and surgical chests were in readiness, easily prepared articles of food, stimulants, and water were on hand, and our ambulance company...did, and is still doing excellent service."

The Second Battle of Manila nearly split the Army of Liberation in two. The Filipino leader and his forces retreated north to their capital at Malolos, while the southern half remained south of the Pasig River. Otis severed the two forces completely and secured his southern and eastern fronts, and then launched a northern offensive along the Manila-Dagupan Railway to crush Aguinaldo. From the beginning, Otis faced personnel, logistical, and environmental problems for which his experience and parsimonious nature were not prepared. He did not have a large enough army to keep rebels in the south in check, screen Manila, and pursue Aguinaldo, but he stubbornly refused to significantly increase manpower estimates sent to Washington. Campaigning in the jungles and rice paddies was slow, tedious, and debilitating work. In only a few weeks, chronic diarrhea, skin diseases, fatigue, heat injuries, various fevers, and depression took a large toll on Otis' effective strength. Logistically tied to the Manila-Dagupan Railway, he struggled with caraboa carts and porters to supply food and ammunition to forward elements beyond the reach of the railway. Compounding these difficulties was the mustering out of volunteer regiments in April. On March 2, Congress attempted to improve this situation by passing an army bill that extended state regiment duty in the Philippines, increased the Regular Army to 65,000 men, and recruited a 35,000man volunteer force for service in the islands; but effects of this legislation would not be felt until late summer.19

Back in Washington, this same congressional legislation left the surgeon general in a state of frustrated despair. Talk in the War Department and on Capitol Hill

since late 1898 gave Sternberg the impression that the 50,000-man army then authorized would soon be expanded to an end strength of 100,000 enlisted men. To support such a force, he submitted a Medical Department organizational memorandum to Secretary of War Russell Alger on November 30, 1898 calling for one surgeon general with the rank of major general, one assistant surgeon general and one medical inspector general with the rank of brigadier general, 20 surgeons with the rank of colonel, 40 surgeons with the rank of lieutenant colonel, 150 surgeons with the rank of major, 309 assistant surgeons, and a Hospital Corps of 4,750 men. Limited to 400 contract surgeons, Sternberg also requested the authority to appoint as many contract surgeons as circumstances required and pay them up to \$150 per month.20 When the House ignored his proposal, he pleaded with Alger to recommend a compromise to the Senate for an increase of 310 medical officers, but stated, "This will by no means be an adequate provision...for an army of 50,000 men and will call for the employment of a considerable number of acting assistant surgeons..." Congress only granted the Medical Department an additional 43 medical officers and, while it increased the pay for contract surgeons, it did not increase their numbers or those of the Hospital Corps.²¹

On May 16, the capture of San Isidro ended Otis' rather disappointing spring campaign. Although his army had pushed 40 miles north into the Balucan Province, it had not destroyed the Filipino army nor forced the rebel government to surrender. In the process, Otis had exhausted his army, supplies, and medical support. Lippincott managed to sustain effective medical support to the Eighth Corps throughout the campaign. While he had fairly stripped the regiments of their surgeons for work in the hospitals before February, he reversed the process at the beginning of the campaign and was able to keep enough surgeons with the troops. But by May, a long logistical and evacuation line and burgeoning sick rolls, which included many medical officers and hospital corpsmen, had stretched medical capabilities to the breaking point. Old age and ill health brought on by the stresses of the campaign brought Lippincott to the breaking point as well and, in mid-May, Lieutenant Colonel Alfred Woodhull inherited this unenviable situation.²²

In the first of numerous reports to Sternberg, Woodhull poured out his frustrations in concise detail. There were too few hospital beds and medical officers to attend to them. The spring campaign had filled the fixed hospitals in Manila, Corregidor, and later at Malolos to overflowing, a situation Woodhull attempted to relieve by sending patients to the *Relief* and Morgan City in between their voyages to the states. The campaign had spawned a growing number of regimental hospitals, which Woodhull considered "pernicious" because they could not all be manned by physicians as U.S. forces advanced north.²³ Otis denied Woodhull's request for a field hospital at Malolos to support MacArthur's advancing division, declaring hospital facilities in Manila were sufficient, and intimated that the surgeons were holding on to men who were well enough to be at the front. MacArthur soon convinced his commander that a field hospital was required when the Second Division headquarters was established at San Fernando, but it did not significantly relieve Woodhull's burden in Manila. In addition to too few beds, the chief surgeon

commented "the administrative work shows great lack of system and of energy. The hospital grounds have been in a wretched state of police; the Hospital Corps seems to have neither system nor order for its control; there is no dining room, no proper facilities for the preparation of food or its distribution...the wards which I have incidentally passed through are dirty and in poor order, they are horribly over-crowded and insufficiently manned both as to medical officers and attendants."24 The candle was being burned from both ends, and disease was eating at it from the middle. To compound the problem, Woodhull had to struggle with Otis' parsimonious caution and disregard of the Medical Department to obtain the personnel, facilities, and operational intelligence he needed. Otis approved all telegraphic communications from the command and, therefore, Woodhull could only accurately communicate with the Surgeon General's Office by mail, which took five to seven weeks. After rigorous debate, Otis permitted Woodhull to wire for 10 medical officers, when two to three times that number were required. Furthermore, Otis' distrust of medical officers precluded his chief surgeon from participating in operational planning. As Woodhull told Sternberg, "Expeditions are sent out with no knowledge on the part of this office and...it is only by the very energetic and efficient work done by the division and brigade surgeons that disaster to the Medical Department is averted."25

By June 1899, the majority of army units on Cuba were in fixed quarters. Hospitals had been established or were under construction in Havana, Pinar del Rio, Guanajay, Camp Columbia, Matanzas, Paso Caballo, and Sagua la Grande. However, typhoid fever continued to generate concern during the winter and spring of 1899. An extensive outbreak among regiments of the 8th Cavalry and 15th Infantry near Puerto Principe led Sternberg to dispatch Walter Reed to the city in mid-April to conduct a sanitary inspection of the camps, barracks, and hospitals in the area as well as an investigation of the typhoid outbreak. In his instructions, Sternberg stated, "If this can be traced to a neglect upon the part of medical officers to make proper sanitary recommendations, or of Commanding Officers to enforce such regulations, or of Quartermasters to supply the necessary shelter and appliances for the protection of the health of our troops, you will endeavor...to fix...responsibility for such neglect. You will also ascertain whether the sick have been properly cared for and whether there has been any deficiency in the supply of suitable food or necessary medicines, or other articles necessary for their comfort and recovery."26 As in 1898, Reed found that inexperienced surgeons did not recognize early cases and, as a result, failed to recommend measures to preclude further spread of typhoid.²⁷

Sternberg recognized this continuing dilemma could only be rectified by education, not only of regular army medical officers, but also of a large corps of trained volunteer and National Guard medical officers who would swell the ranks of the Medical Department during wartime. If this idea became reality, it would require the formal sanction of the American Medical Association. Presented to this body at its annual meeting in Columbus, Ohio, in June, "Sanitary Lessons of the War" gave a concise review of the army's experience with the disease since the Civil War;

described field hygiene techniques for prevention; eliminated future diagnostic confusion between typhoid fever and malaria based on epidemiological differences, clinical presentation, simple laboratory tests, and therapeutic response; and noted a regrettable deficiency in preventive medicine education in U.S. medical schools. Not only was it a vision of what future military medical education should be, but also it was a lesson plan in how to get there.²⁸

While typhoid fever and relapsing cases of vivax malaria, and camp and hospital facility inspections were the main drivers for Reed's spring visit and a return trip in July, he also observed for cases of yellow fever and gathered information on the progress of yellow fever investigations being conducted by Doctors Eugene Wasdin and Henry Geddings of the Marine Hospital Service. These investigators had been in Havana since November 1897 and were making inroads toward confirming Giuseppe Sanarelli's *Bacillus icteroides* as the etiologic agent of the disease. Sternberg was very concerned. Upon returning from Paris with a culture of the bacillus in the fall of that same year, Sternberg had turned it over to Reed and James Carroll for further investigation and comparison with Bacillus X. Their experiments demonstrated many differences between the two microorganisms, but both caused the same symptoms in dogs. In January 1898, Sternberg dismissed the differences in culturing the organisms and concluded "it is possible...bacillus [x] is concerned with the etiology of yellow fever."29 Clearly, he was clinging to the hope he would be confirmed in the continued observations of Reed and Carroll, but the war interrupted their research. By the time occupation forces were taking over from the Spanish in December, he had lost touch with the work of Dr. Eugene Wasdin and Dr. H. D. Geddings. Anxious that they may have stolen a march on him, Sternberg sent Contract Surgeon Aristides Agramonte, a pathologist, to conduct autopsies and laboratory work at Military Hospital No. 1 and keep him informed of their activities.30

Epidemiologically speaking, 1899 was a slow year for yellow fever in Cuba. Outbreaks remained small and isolated, which put a damper on Wasdin's and Geddings' research. To obtain enough autopsy numbers, Wasdin had no qualms about performing a deception or two. In early February, an autopsy on an 8th Infantry soldier supposedly dead with yellow fever was performed by Agramonte, with William Gorgas, Carlos Finlay, Albert Truby, Wasdin, and Geddings in attendance, which revealed ulcerated lesions in the small intestine—an obvious typhoid death—but Wasdin counted it among his yellow fever cases. Agramonte wrote to Sternberg, "Their conclusions have not surprised me.... I appreciated that they had been formulated probably even before their appointment to make the investigation. What really amazed me not a little is...their impertinence in insisting that Patrick Smith was a yellow fever case in spite of all evidence to the contrary..." "31

In June, Wasdin and Geddings presented results—14 Havana and 21 New Orleans cases, 92 percent and 85 percent positive for *B icteroides*, respectively—that confirmed Sanarelli's results. Moreover, they claimed their investigations and Sanarelli's had satisfied all of Robert Koch's postulates. It was a powerful argument, but Sternberg remained unimpressed. Although Koch's method was the gold

standard, results obtained by it could be interpreted erroneously. They had found an organism in sufficient numbers to justify their claim; however, preliminary evidence provided by Reed and Carroll suggested that neither B icteroides nor Bacillus X was the organism they sought. *Bacillus X* was found to be a common colon organism. More importantly, they had shown that *B icteroides* was identical to the hog cholera bacillus, and serum of animals immunized with B icteroides caused hog cholera bacilli to agglutinate or clump in a test tube, a clear indication the two organisms were closely related, if not identical. Sternberg had stated his skepticism in the validity of B icteroides to Wasdin and Geddings during his January inspection tour. He observed that there was no satisfactory evidence that lower animals ever contracted yellow fever during an epidemic, and multiple experiments over the past 20 years had failed to demonstrate any susceptibility in various laboratory animals. Moreover, man was extremely susceptible to yellow fever; but throughout all of his experiments and those conducted since, no laboratory epidemic had ever occurred. Although Sternberg had Agramonte continue his experiments with both organisms and monitor the Marine Health Service investigators, it was becoming obvious that he and Sanarelli had been fooled by the plethora of microbes that reside in the intestinal tract.32

Sternberg made no direct public comment on the report of Wasdin and Geddings published in June, likely a reflection of his contempt for shoddy and dishonest research, but an article by Sanarelli that appeared in the Medical News in August received a prompt reply. The Italian professor's condescending tone, paragraphs filled with invective for Sternberg's earlier work and the recent investigations of Reed and Carroll, and a reproach for not admitting the validity of his claim were clearly contentious and intended to generate a similar response. The somewhat obsequious editorial by Dr. J. Riddle Goffe in the same issue only added fuel to Sternberg's already burning indignation. However, Sternberg did not let his emotions cast an unprofessional shadow over his summary of accumulated evidence against B icteroides prepared for the Medical News. There was no need to do so. The bacteriological and immunological experiments of Reed and Carroll-in which Sternberg had implicit faith—had made the Bacillus an untenable contender as the etiology of yellow fever. Furthermore, clinicians in Rio de Janeiro and New Orleans provided supporting evidence that Sanarelli's antitoxic serum was also worthless. B icteroides was down and nearly out, and neither Sanarelli's stinging comments nor Wasdin's deceit would revive it. From a professional and humanitarian standpoint, Sternberg could only lament the results of his own laboratory. The world would have been better had either he or Sanarelli been correct, but he still had hope the Army Medical Department would discover the etiologic agent.³³

With the exception of one campaign in the southern Philippines, the army remained on the defensive throughout the summer of 1899. The withdrawal of state regiments, which were well supplied with medical officers, and the arrival of regular and volunteer units during July and August created a shortfall of all officers that—with increasing disease rates—finally captured Otis' attention. He endorsed Woodhull's early August request for more regular medical officers. At that time,

18 percent of the Medical Corps were on duty in Luzon, but illness significantly reduced their effectiveness. Woodhull pleaded for more regular medical officers because of their ability to implement practical preventive medicine, but cautioned Sternberg not to send Cuban veterans for fear malarial relapses would render them ineffective. Once the army had grown to sufficient size and the summer rains ended, Otis would launch a campaign to quash Aguinaldo's rebellion for good. To support this campaign and accommodate the large number of sick would require 3,000 hospital beds.³⁴

As Woodhull's letters made their way to Washington, Sternberg conducted a personal inspection tour of medical assets at the Presidio and other western posts. The Medical Supply Depot at San Francisco was expanding to hold supplies for 100,000 men for six months. To allow Purveyor, Lieutenant Colonel J. V. D. Middleton to focus on Philippine demands, Sternberg reduced the depot's responsibility to 20 posts in the Departments of California and Columbia, and restricted depot operations in New York to support operations in Cuba and Puerto Rico and provide backup services to San Francisco. Colonel Forwood, now Chief Surgeon at the Presidio, had been sent by Sternberg to oversee the construction of a new hospital, the development of a reception camp for volunteers that would accommodate five regiments, and the establishment of a quarantine camp and school of instruction for the Hospital Corps on Angel Island. Forwood conducted business with the same efficiency as at Camp Wikoff, and Sternberg was pleased with the progress.³⁵

The downhill spiral of medical activities described in the missals from Manila, however, was an eye opener for the surgeon general. The nature of active operations and diseases on Luzon, and stateside medical support activities were consuming Sternberg's resources at a phenomenal rate, faster than he could acquire and deploy them. Seventeen regular medical officers and 29 contract surgeons had been deployed in late January, and another seven regulars and nine contract surgeons had been sent in June. Nurses—both contract and Red Cross—also had been sent. When the General Hospital at the Presidio opened in July, it was immediately filled to capacity, and Forwood began requesting more medical officers for the hospital and reception camp. Sternberg assured Woodhull he would continue to send physicians and nurses. The hospital ship *Missouri* would sail from San Francisco after repairs were completed in August, with a full load of supplies, 100 hospital corpsmen, stewards and acting stewards, and two Edison type x-ray machines. He sent a short telegram to Forwood that there were "plenty of doctors on orders for the Department of California." ³⁶

To free up more Medical Department resources, Sternberg closed the newly completed general hospitals at Fort Monroe and in Savannah. However, he declined to halt new hospital construction. Four new hospitals were opened and ground was broken for eight more during fiscal year 1900, and the surgeon general had been eyeing Fort Bayard, an old fort due for closure, in southwestern New Mexico as a suitable site for a tuberculosis sanitarium. The new Secretary of War, Elihu Root, who had replaced Alger in late July, approved the plan and the \$9,000 required to make it inhabitable.³⁷

Root's support for a project Sternberg considered extremely important for army health was gratifying. Root, a lawyer with no military experience, was rumored to be rather stern and harsh. In time, his selection to the post would prove to be one of President McKinley's best decisions. Root found the War Department—split between the Secretary's power of the purse, the commanding general's visions of command, and bureau chiefs jealous of their prerogatives—an inefficient, chaotic mess. Root formulated a series of reforms that would reverse the current situation. These reforms became the foundation for America's 20th century army. However, in 1899, Root moved cautiously, aware of the tremendous resistance to any organizational or operational change in the army.³⁸

Although Root soon clashed with Commanding General Miles and may have had his difficulties with some of the bureau chiefs, it appears that he and the surgeon general developed a strong relationship early on and he admired Sternberg as a soldier and scientist. Throughout August and September, Sternberg worked with Corbin and Root to provide sufficient hospital beds, supplies, and ancillary staff to the Eighth Corps. A pavilion-style hospital was the most desirable accommodation, but the six-month construction time made it impracticable. Therefore, the surgeon general advised Woodhull to obtain as many available buildings as possible and rely on the 500 hospital tents that were being sent. Twenty nurses sailed aboard the Relief, and an additional 150 hospital corpsmen were on the Missouri. Sternberg wrote to Woodhull on September 23: "The Secretary of War fully agrees with me that you should have ample hospital accommodations and that there should be at all times at least 500 vacant beds ready for any emergency.... We are prepared to send you all the supplies and money necessary to enable you to provide for the care and comfort of the sick and wounded.... One hundred tons of medical supplies were lost upon the 'Morgan City.' Orders have been given...to duplicate these supplies and forward them to you as soon as practicable. I expected the Hospital Ship 'Missouri' would have been able to sail several weeks since, but she has been delayed by the extensive improvements considered necessary to fit her thoroughly for the work expected of her. She will sail within a few days and carries a full load of medical supplies.... I have been sending a large number of medical officers; and, so far as medical officers of the Regular Army are concerned, it will not be practicable to send any more at present."39 Casting a critical eye on the Presidio, the surgeon general told Forwood and Major Alfred Girard, commander of the general hospital, that they had too many medical officers and contract surgeons. He directed them to send more to Manila or send them home. By the time Woodhull received the letter, Sternberg found 13 more medical officers and 40 additional contract surgeons for Philippine service, and sent more nurses. 40

Otis' northern offensive, begun on October 9, suffered from a lack of logistical support, torrential rain, and the treacherous Philippine terrain. By the end of November, however, the Army of Liberation had been shattered, and Aguinaldo was sent fleeing into the jungles of the far northern provinces. Although Otis and his division commanders basked in their victory, the American logistical chain—extending nearly 200 miles from Manila as General Young cleared Filipino

resistance from the Ilocano provinces—stretched medical support to the breaking point. Woodhull reported to Sternberg on November 13 that "the battalions of the new regiments are not only serving separately but some of these are already being split up for garrison purposes.... The campaign in progress will undoubtedly lead to the serious incapacity of medical officers and also to the necessity for distributing them at various small stations which there is every reason to suppose will now be held."41 Three days later, Woodhull wrote to his chief again of the relatively large field hospitals being established, staffed, and supplied along the American line of advance. He also related that hospital rolls were burgeoning-2,197 inpatients by the third week of November. Presuming these numbers would continue to climb, Woodhull urgently requested more medical officers, worked to expand both of the reserve hospitals and the newly opened Santa Mesa facility, and begged his commander for money to complete the physical plant on Corregidor. But Otis remained obtuse. He was secure with the 257 physicians he had in theater, so he declared no funds were available for hospital work and no more hospitals would be established in Manila.42

Otis was convinced the scattering of the Army of Liberation into the northern hills signaled an end to major resistance to American authority. Declaring the war was over and "all we have to do now is protect the Filipinos against themselves," he concentrated on apprehending dispersed bands of Filipino rebels and occupying larger cities and towns in the north.⁴³ McKinley, who was gratified at this success, created a second Philippine Commission with broad legislative authority to establish municipal and provincial governments in preparation for the transfer of power from military to colonial administration. The president selected William Howard Taft, a federal circuit court judge from Ohio, to head the commission beginning September 1.⁴⁴

Operations in the Philippines had stretched Medical Department personnel thin across Luzon and promised to strain them further in the southern provinces. The transition from combat action to stabilization duties on Luzon, however, would reduce the medical emphasis on casualty care, evacuation, and diseases inherent to long campaigns, and allow the Medical Department to focus on routine care and public health. Public health had remained a paramount concern for the welfare of the soldiers and the Filipino population, even at the height of the insurrection. Now the time appeared right to strengthen the public health infrastructure in Manila and expand its operations. In the wide variety of diseases—malaria, dysentery, dengue fever, plague, beriberi, tuberculosis, smallpox—endemic to the archipelago, Sternberg saw a tremendous potential for practical medical research. With this in mind, he created in January 1900 the first board for the study of tropical diseases. A formal board would continue to foster the atmosphere of academic excellence and achievement Sternberg had initiated with the creation of the Army Medical School and expansion of laboratory activities in 1893. That atmosphere had already begun to accrue dividends by the time the Tropical Disease Board was organized. With only basic laboratory equipment and a zeal for medical science reminiscent of their chief's days at isolated western posts, young medical officers were contributing steadily to an ever-increasing fund of medical knowledge. Assistant Surgeon Walter Cox described Malta fever (brucellosis) at a southwestern post in 1898, and Assistant Surgeon Baily K. Ashford demonstrated that Puerto Rican anemia resulted from the hookworm, *Necator americanus*, the following November. In the Philippines, Lieutenant Richard Strong had already begun studying dysentery in the First Reserve Hospital; and, after bubonic plague broke out in Manila's Chinese slums in January 1900, Lieutenant William Calvert prepared an instructional text outlining methods to control and eradicate the disease that included poisoning rats, although this vector had not yet been proven.⁴⁵

In his report to the Secretary of War for 1900, Sternberg stated: "It was my desire that this board should be given all the appliances and assistance necessary for conducting their researches and every opportunity for obtaining access to cases and making autopsies, etc. In my letter of instruction to the chief surgeon I stated ... the members of the board need not necessarily work in the same laboratory, and while pursuing their general investigations they could make blood examinations and bacteriological researches for the purpose of clinical diagnosis as well as with a view to the promotion of our knowledge of infectious diseases.... Each member should make an independent report of investigations conducted by him and of the general result of his blood examinations, etc. A quarterly report of progress should be made by each member of the board, which should indicate the nature of the work in which he has been engaged and the results attained.... Special attention should be given to tropical dysentery, to the malarial fevers...to beri-beri, to intestinal parasites, and in general to all tropical diseases the etiology of which has not been completely worked out."46 Complete laboratory facilities to support this grand plan had been established at the First Reserve Hospital by the time Sternberg created the board. In addition, hospital ships Relief and Missouri had laboratory capabilities that frequently functioned effectively as portable labs, and the Manila Board of Health was awaiting a full complement of bacteriological apparatus, which would make it an independent laboratory. All these assets provided valuable assistance to local hospitals and commanders; however, Sternberg's instructions defined a larger, more autonomous and permanent goal: the establishment of a professional, productive, and enduring research capability in the Army Medical Department.47

As the Tropical Disease Board became established and clarified its role in assisting Otis' overall pacification program, Filipino rebels began to mock Otis' efforts. Aguinaldo had called for an insurgency war throughout the archipelago. Theirs would be a war of attrition, one in which they would hopefully destroy the American will to remain. According to Aguinaldo's calculations, he had 11 good months in which to wear down that will. Then the American electorate would supply the coup de grace at the polls and hail William Jennings Bryan as President.⁴⁸

Greenleaf, who replaced Woodhull as chief surgeon on December 22, faced a challenge of greater magnitude and complexity than either of his predecessors. As he explained to Sternberg in mid-February: "The military situation...has changed materially within the past three months, the policy being to occupy all important

strategic points with comparatively large bodies of troops, and a good many... points of minor military importance with small bodies of troops. While many of these stations are on the line of railroad or comparatively near each other on the sea coast, there is a large number...so completely isolated, or approachable only over mountain trails or almost impassable roads, that communication for the purpose of supply is exceedingly difficult and infrequent.... The military conditions above...affect equally, and perhaps more seriously, the personnel of the Medical Department, since any of these detached commands is liable to be attacked by, or to themselves attack the insurgents who infest their immediate neighborhood, and have more or less wounded requiring medical attendance. The number of Medical Officers now in these islands is entirely inadequate to meet these conditions, and we have...in the several Divisions and Military Districts, 80 stations without doctors.... In many cases there are neither Hospital Stewards nor members of the Hospital Corps, and in several instances these commands have been in contact with the enemy and had wounded men who could not receive any medical attendance."49 Greenleaf's difficulties were compounded by illness among medical officers; transportation delays from stateside that left arriving contract physicians with only a few months of service; a desire on the part of these physicians, since the conventional war was finished, to annul their contracts and go home; and the expensive manpower costs associated with the Manila hospitals. To relieve this situation, he directed medical officers to treat their sick and wounded in available field, division, and base hospitals. He gave medical officers responsibility for multiple outposts, spread his corpsmen as thinly as possible among the regiments, and fashioned lighter medical and surgical chests for each detachment that could be more easily carried by native porters. And, more medical officers were requested. Greenleaf estimated a total of 360 surgeons were needed to keep the Medical Department from embarrassment. He cabled his requirements to the Surgeon General's Office, but apparently Sternberg questioned the validity of his thinking in these short, concise statements from Manila.50

Greenleaf, an experienced soldier, was not afraid to take charge and make decisions without waiting for the blessing of the surgeon general's office if circumstances demanded. Nor was he afraid to speak frankly to the surgeon general. "I deem it my duty," Greenleaf told his chief, "to ask that...any requisitions I make, either for men, money, or materials, may be acted upon in their entirety, or...if disapproved in whole or in part, I be notified of your action by cablegram. In arriving at the necessity for these items I am particularly careful to investigate thoroughly all the circumstances connected with them, and do not make requests unless it is deemed necessary, and then state exactly what I think is needed. The distance which separates us is so great.... I cannot in many instances wait for the mail to explain my reasons for making requests...and have assumed...my knowledge of the situation and...experience in the service would be sufficient to warrant you in acting favorably on any that I may send." He noted that 28 officers were sick, a number that would undoubtedly increase with active campaigning. He also noted that the remaining officers were stretched so thin that some were attending up to

five field stations and that "this state of affairs has produced much unfavorable comment from line officers regarding the administration of the Medical Department." ⁵²

Sternberg's hesitancy in approving all of Greenleaf's requests does not appear to come from any distrust of motives or actions, but rather from difficulty in understanding the rapidly changing events in the archipelago. Sternberg worked diligently to stay current with operations in two theaters, but suffered from not having firsthand knowledge of the fluid conditions in the Philippines. Greenleaf noted that time and distance delayed correspondence for weeks. This left an inevitable—and extremely frustrating—disconnect between Manila and Washington in which the surgeon general tried to keep up with and control real-time events through cablegrams and letters. The Spanish-American War experience had honed and tempered his ability to communicate with subordinates in a clear and concise manner, rapidly synthesize and distill operational and administrative data, make decisions, and project power from his Washington office. The conventional war with Spain, however, had not prepared him—or the Medical Department—to support operations in an intensifying insurgency war. With a larger budget and—apparently—a better working relationship with Root's War Department, obtaining, replacing, and moving supplies and equipment was less problematic. However, despite Sternberg's lobbying efforts with Root and McKinley, Congress denied his request for an additional 124 regular medical officers in February 1900, leaving him with 192 regular and 78 volunteer surgeons, and roughly 390 of the authorized 400 contract surgeons. Further lobbying efforts obtained authorizations for another 80 contract surgeons for fiscal year 1901.53

Sternberg extended regular and contract service to two years and required all contract surgeons to serve a full 12 months in theater. Officers and hospital corpsmen were plucked from army hospitals across the United States and shifted from the Caribbean theater of operations. Advertisements for more contract surgeons appeared in many leading medical journals, medical examining boards sat almost continuously, and a steady stream of assignment orders flowed from the typewriters in the Surgeon General's Office. The weak link in the movement chain was the Army Transport Service. It had performed admirably as a safe, dependable strategic medical evacuation asset since its creation, but failed as a rapid and flexible means of putting physicians in theater due to refit and resupply time. During February, a total of 45 commissioned and contract surgeons had received orders, but by mid-March only nine had sailed.⁵⁴

Nurses were also needed in ever-increasing numbers. Fortunately for the Medical Department, enthusiasm for Philippine service was high. Dr. Anita Newcomb McGee, Director of the Provisional Army Nurse Corps (Female), said "applications...pour into the office in a steady stream. It seems...as though almost every nurse who has had a taste of the army wishes to return to it."55 Finding suitable, well-trained nurses whose conduct would be dignified and discreet was always of prime concern. McGee sought the finest, but despite her efforts some slovenly nurses and a few with less than stellar moral character and no nursing ambitions arrived in Manila in late 1899. Nurses in the Philippines needed more direct supervision. To this

end, the surgeon general directed Greenleaf to temporarily assign Miss Mary J. McCloud, Chief Nurse at the First Reserve Hospital, as inspector of nursing services for all hospitals with nursing personnel and on the *Relief*. Her visits were to be followed by a complete report that addressed a comprehensive range of issues. Sternberg wanted to know if the nursing was "in all respects equal to that of the best civil hospitals?" If not, where were the defects? Were duty hours strictly kept; were nurses neatly dressed? Did the chief nurse have executive ability, tact, and suitability for her position? Were the nurse's quarters and rations adequate; was there a proper sense of discipline; what was the status of morale; and how did the climate affect the health of the nurses? And lastly, did McCloud have any recommendations for increasing the efficiency of the corps?⁵⁷

McCloud—probably recommended by McGee—was a good choice for the work Sternberg had in mind. She had brought organization, discipline, and efficiency to the First Reserve Hospital nursing service since her arrival the previous summer. But when Greenleaf read Sternberg's directive, he was aghast. "Believing... the conditions in the Archipelago are not fully understood by you, and the extension of the nursing service unknown to you at the date of the letter, I respectfully submit the following statement.... Contract nurses are now on duty at the following named hospitals: First Reserve and Santa Mesa in Manila; Corregidor Island, Manila Bay; Tayabas, Province of Laguna; Calamba, Province of Cavite; Dagupan, Province of Pangasinan; Vigan, Province of Ilocos Sur; Aparri, Province of Ilocos Norte; Iloilo, Island of Panay; and the Hospital Ship 'Relief.' In the present unsettled state of affairs travel by land or by sea is not only uncomfortable and trying to one's physical strength, but in certain places on land is unsafe by reason of the constant presence of prowling band of insurrectos or landrones, and can only be accomplished with safety when the traveler is protected by a large military escort.... The railroad from Manila to Dagupan, 122 miles long, is in a bad state of repair, the carriages without upholstering, toilet or other conveniences and very uncomfortable, the trains are crowded...and the official time consumed...is nine hours, but...is oftener twelve hours with occasional wrecks, in which lives are often lost."58

Sternberg responded to Greenleaf's real concerns for McCloud's safety by stating it was not his desire "she should be placed in danger for the sake of making such inspections," but hoped she could visit hospitals in Manila, on Corregidor, and the *Relief*.⁵⁹ Written on June 30—presumably the earliest date he could have responded—this episode illustrates Sternberg's difficulties in staying on top of events in the Philippines, and his changing attitude toward the status of nursing in general. Although forced by circumstances to accept the services of female nurses in early 1898, by the end of the year Sternberg and McGee agreed with members of the civilian Committee to Secure by Act of Congress the Employment of Graduate Women Nurses in the Hospital Service of the U.S. Army that nurses should be integrated into the army. However, neither Sternberg nor McGee could support the committee's integration plans that included a semi-civilian nursing service commission in the chain of authority over nurses and hospital corpsmen. The surgeon

general was also concerned about the numbers of nurses authorized by law, their pay, and funding for construction of quarters and so forth. While female nurses still posed a moral dilemma for the Medical Department, in the spring of 1900 female nurses could boast of 20 months of dedicated professional service in fixed facilities, tent hospitals, and aboard hospital ships and transports in three theaters of operations, and for the past year in a burgeoning insurgency war. Their skills were appreciated and now demanded in nearly every army hospital. To Sternberg's credit, he realized neither a few bad apples nor his angst over women being exposed to the rigors of an army in the field altered the fact that female nursing services were required by the Medical Department. His orders made McCloud the chief nurse for the Eighth Army Corps, and the standards he expected her to maintain reflected this changing attitude.⁶⁰

Sternberg also recognized the potential for trained nurses to instruct hospital corpsmen in practical nursing on the wards, thereby extending nursing services. Congress was paring down the Hospital Corps, which had been expanded for the war with Spain. In June 1900, Congress appropriated monies for 200 hospital stewards, 356 acting hospital stewards, and 3,500 privates, forcing the surgeon general to set allowances for each theater of operations. The Philippines received the majority, but experience and quality were wanting. In Manila, Hospital No. 3 opened a school of instruction for these partially trained corpsmen coming from the states and those transferring from the line. Sternberg also suggested to his hospital commanders that female nurses should be engaged in instructing corpsmen in ward work, cooking, and so forth. With the exception of Major Valery Havard, who suggested a trained male nurse corps, the concept appears to have been well received. By the following spring, nurses were providing advanced training to corpsmen on all aspects of ward nursing in most of the army's major hospitals.⁶¹

By April 1900, American pacification efforts and Filipino resistance had created a confusing collage of success and failure throughout the archipelago. Civic action programs had established municipal governments in many towns, roads and bridges were being built, schools and new marketplaces opened, telegraph lines strung, and public sanitation improved. These enclaves of Filipino support for American sovereignty, however, had become islands surrounded—and infiltrated—by a sea of guerilla resistance, and insurgents came to rely on supplies from towns and villages to sustain them in the field and intelligence provided on American activities. Attacks were made on these garrisons and the patrols and scouting parties dispatched from them. Otis, now labeled by the press as wholly inept, remained committed to the virtues of pacification by civic action, but the pressures of this deteriorating situation took their toll on him. With casualties mounting in a shadow war he could not comprehend, and soon to be saddled with a new Philippine Commission chairman, Otis asked McKinley to relieve him so he could attend to neglected personal matters back home.

MacArthur, who assumed command from Otis on May 5, had been critical of Otis' less than aggressive military posture for months. Yet, while his military instincts may have urged him to intensify operations against the guerrillas, his

political conscience advocated caution. He saw himself as the scapegoat should Otis' policies fail, and Taft would be a constant reminder the president had little confidence in his abilities. These considerations, plus the fact that the monsoons had started once again, led MacArthur to proceed with the policy of conciliation and civic action, which increased the number of military stations outside of Luzon by a third.⁶³

For Greenleaf, the expansion of garrisons meant begging the surgeon general for more physicians and corpsmen, but through the first six months of 1900, his burden in supporting benevolent pacification had taken on a new and unplanned medical dimension. Wherever army units patrolled or established stations, their surgeons found sick and wounded Filipinos of all ages imploring them for relief. Medical officers—unwilling to refuse—soon had a growing indigent medical practice that contributed significantly to pacification efforts, but was not only officially unfunded, but also against army regulations. Both Philippine commanders had tended to ignore this point in prosecuting McKinley's policies and gave Greenleaf meager funding to continue the unofficial mission. Greenleaf was in a difficult position, but apparently did not inform Sternberg of these events. Instead, he requisitioned large supply orders—such as 3,600 pounds of pearl barley, 3,600 pounds of farina, and six tons of malted milk—and continued to demand unquestioning support from the Surgeon General's Office. When Sternberg informed him that six tons of malted milk cost \$13,000, and he was apprehensive that "there may be unauthorized use of these supplies by persons not entitled to them,"64 Greenleaf understood which way the wind was blowing from Washington and took his case to what he thought was a higher court in the office of the new Philippine commissioner. 65

The corps surgeon, who was committed to benevolent assimilation, presented a good and honest case to Taft. He noted the war had taken a terrible toll on Filipinos and providing for the sick was very important. "Our troops are now occupying nearly all of the towns of any importance in the Islands.... Medical officers on duty with them...are constantly appealed to by these people for relief of both medical and surgical cases, and the natural instincts of humanity...have led them to respond to these appeals almost unanimously. The effect of this humane work...has been marked, and numerous instances have been brought to my notice where Medical Officers possessed more influence with the natives than any other class of Americans in the neighborhood."66 However, there was precious little funding for the humanitarian effort, and "Medical Officers have drawn from the supplies furnished to them for the use of the troops, to meet the obvious necessities of the case."67 Greenleaf concluded his appeal by declaring "the average American doctor...cannot and will not resist appeals to his humanity, and will take whatever comes handy to relieve suffering and distress; this fact should receive due consideration by the medical authorities at the War Department."68 Wanting to help, Taft added an endorsement to the letter recommending "the supply of medicines be not reduced for...nothing helps more in the pacification of the Islands than such benefits as are thus conferred upon the natives," and forwarded it to the Secretary of War.69

Whether Greenleaf was confused as to the date—September 1—on which Taft

assumed authority in the archipelago from MacArthur remains a mystery, but Adjutant General Henry Corbin clearly understood who was in command. Corbin redirected the letter to MacArthur with a second endorsement: "Respectfully referred to the Commanding General Division of the Philippines for report as to whether the recent large requisitions for medicines and medical supplies...was in fact...designed not merely for use in the military service but also for use and distribution among the people of the Philippine Islands." Corbin reminded MacArthur that "no requisition for such purpose should be made without stating the fact," that Greenleaf's letter should have been sent through MacArthur and not the president of the Philippine Commission, and finally that if MacArthur desired "to use medical supplies for the relief of the people of the Islands, his application for authority to do so will receive full consideration." The surgeon general probably felt a certain sense of vindication in Corbin's directives to Manila, but he had precious little time to bask in it.