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# THE 1918–1919 INFLUENZA EPIDEMIC IN LOS ANGELES

By N. Pieter M. O’Leary

*... a fuller comprehension of humanity’s ever-changing place in the balance of nature ought to be part of our understanding of history, and no one can doubt that the role of infectious diseases in that natural balance has been and remains of key importance.* —William H. McNeill

The influenza epidemic that gripped the United States between the spring of 1918 and mid-1919 has long been overshadowed by the First World War as the principal historical event of the early twentieth century. In a fourteen-month period the global influenza epidemic, or pandemic, was estimated to have killed 25 to 50 million people, 675,000 of them in the United States.<sup>1</sup> By contrast, roughly 15 million men were killed on European battlefields during the period 1914–1918.<sup>2</sup> The Influenza virus washed over the United States in three waves: the first in mid-March and April 1918; the second and most virulent strain from late August to mid-December; and the third from January 1919 until the virus slowly ebbed in mid-1919. American cities differed somewhat in the measures undertaken to prevent the spread of the illness when the second wave washed over the country. These differences, coupled with the speed of the initial response by local officials and public compliance, largely determined the success American cities had in battling the influenza pandemic.

This study will focus on the second and most potent wave of the influenza pandemic that swept the city of Los Angeles from early October 1918, when

the first civilian deaths were reported, until late December 1918 when the illness retreated from the city. The swift actions of Los Angeles city council members and health officials to stem the spread of the virus and to provide relief to the unfortunate victims will be examined. Los Angeles officials successfully limited the spread of the illness, reduced the number of deaths due to influenza and, except in one instance, maintained peaceful public compliance. The successes in Los Angeles will be contrasted with the delayed implementation of measures designed to restrict the spread of the virus in San Francisco. Furthermore, the board of supervisors in San Francisco passed ordinances that were ignored by Bay Area residents, thus weakening board authority. The marriage of delay and public apathy resulted in higher infection and death rates in San Francisco.

Although afflicted with numerous cases of the virus during the first wave of the epidemic in the spring of 1918, Los Angeles, like other cities, was visited by a less virulent form of the virus. The virus was highly contagious, but few deaths occurred. This was the mark of the first wave and what contrasted it with the second wave. The second wave of the virus was just as highly communicable, but it had mutated into an extremely lethal killer. When it struck, no one was prepared for the chaos that ensued.

A new and more deadly strain of the flu virus caused the outbreak of 1918–1919. The flu virus had afflicted humanity for centuries. Visiting annually or bi-annually, it sent those it infected to bed for a week of rest and recovery. What happened in 1918, however, was a mutation of the virus. It became an efficient killer. Basically, the virus was a spherical- or filament-shaped particle covered in protein spikes. The interior contained the genetic make-up of the virus, the Ribonucleic Acid (RNA). When the virus underwent an anti-genetic drift, like it did prior to the outbreak of the first wave in 1918, a minor recombination of the RNA occurred. The result was a new, highly contagious version of an old virus. Some people had immunity, but many did not and were infected. The vast majority of those infected, however, fought off the virus and recovered. When the virus underwent an anti-genetic shift, however, a major recombination of the RNA occurred.<sup>3</sup> The result was an entirely new virus, one to which humanity had little, if any, immunity. This anti-genetic shift of the highly contagious spring 1918 virus made it a killer and marked the beginning of the second wave of the epidemic.

The first influenza cases appeared at Camp Funston, Kansas, on March 4, 1918. It was the beginning of the first wave.<sup>4</sup> The virus spread rapidly throughout military camps in the country. The potency of the flu was unusu-

ally high, but resulted in few deaths. As American troops embarked for the European battlefields later that year they carried with them this altered virus.<sup>5</sup> Then, sometime late in the summer of 1918, as American troops mixed with other young men of all nationalities who were carrying their own version of the same virus which had spread around the world from Kansas, the virus underwent an anti-genetic shift. The result was the rapid spread throughout the world of a dramatically more lethal virus. In fact, so many fell ill and died in Spain that the illness took the name Spanish Influenza.<sup>6</sup> Unfortunately, the new virus was carried back to the United States in late August 1918 and immediately spread. The east coast cities of Boston, New York, and Philadelphia were quickly infected. From these ports of entry the Spanish Influenza spread west via rail and ship to the large cities on the Pacific coast. The influenza virus arrived in Los Angeles in two documented ways, via Arizona, New Mexico, and "other eastern points" to the city's hotels.<sup>7</sup> The second way was by ship. In mid-September, for example, a naval training vessel from San Francisco with 400 of its 700 crew ill with influenza, docked at the San Pedro Harbor Training station. Two hundred sailors on shore leave immediately infected the station, its staff, and the local shipyards.<sup>8</sup> Days later the *Los Angeles Times* reported the San Pedro Training Station had been "placed under quarantine on the account of Spanish Influenza." Military authorities canceled weekly military parades, denied public access, and revoked military leave.<sup>9</sup> Enacted too late, the quarantine was unable to prevent infected sailors from spreading the virus. Dockworkers and other vulnerable individuals working at the Harbor were quickly infected.

The first civilian cases of influenza in Los Angeles were not reported until October 1, 1918, roughly one week after these individuals were originally infected. Ten days later Los Angeles had over 680 reported cases.<sup>10</sup> Los Angeles Mayor Frederick Woodman organized a meeting of city council members and city health officials to "discuss methods of meeting the influenza situation."<sup>11</sup> Ironically, Mayor Woodman called the meeting at a time when a United States Public Health Service spokesperson was quoted urging that there was "no present cause for alarm" even though the number of cases in California had "increased sharply."<sup>12</sup> The October 10 meeting organized by the mayor resulted in two resolutions: one, close public gathering places; recommend all public transportation vehicles be disinfected daily. To spearhead the city's fight against the encroaching virus, the city council created the Health Advisory Board to meet with municipal officials and propose countermeasures.<sup>13</sup>

Advisory Board head Dr. Powers and County Health Officer Dr. Pomeroy immediately took steps to “educate the people” on recognizing, preventing and treating influenza. Recognizing the “scourges of infection” as being nose, throat, and lung secretions spread by coughing and sneezing, as well as shared towels, handkerchiefs, and eating and drinking utensils; citizens were to be on guard. In order to prevent infection, they urged the public to sterilize towels and handkerchiefs, use handkerchiefs when coughing and sneezing and avoid crowded areas.<sup>14</sup> The next day, October 11, the city implemented measures to prevent the spread of the infection. The city council passed an “ordinance to prevent the spread of the epidemic of influenza in the city of Los Angeles.” The ordinance provided for the immediate closing of “any place of public resort in which it [was] dangerous to the public health for persons to congregate.” Such venues included theaters of all types, concert halls, churches, and schools. Also included was the upcoming Liberty Loan Drive, which fortunately was not due to begin until October 12. Individuals found in violation of the law would be “deemed guilty of a misdemeanor,” fined up to \$500 and/or imprisoned for up to six months.<sup>15</sup> Copies of the ordinance were quickly printed and made available for publication by the city’s newspapers. The ordinance would be the city’s primary tool for fighting the spread of the influenza virus. Regardless of newspaper headlines prematurely claiming the ban would be lifted in days, it remained in effect for over six weeks.

San Francisco, by way of contrast, did not implement a closing order until one week after Los Angeles. Between the time of the first documented case in San Francisco on September 24 and when the board of supervisors finally closed all public gathering places on October 18, the city was plagued with a far greater number of cases of the illness than Los Angeles. This difference was due to the fact that not only did influenza appear first in the Bay Area or that public places remained open a week longer, but also because of the patriotic fever that gripped San Francisco. The Fourth Liberty Loan Drive, a federal program whereby the public contributed money toward the nation’s war effort through the purchase of war bonds, was in full swing in San Francisco when the virus first appeared in mid-September. The patriotic fever brought together tens of thousands of people at one time. Nearly 150,000 people gathered in Golden Gate Park to support the Liberty Loan Drive on October 6, for example. As influenza chronicler Alfred Crosby wrote, such a congregation of people was highly conducive to the rapid spread of the virus.<sup>16</sup> Consequently, San Francisco was afflicted with 4,825 influenza cases and 130 deaths by October 19, the day after the board of supervisors enacted a clos-

Mayor Frederick T. Woodman  
(1916-1919) of Los Angeles.  
*Courtesy Los Angeles City Archive.*



ing order.<sup>17</sup> Luckily, the Fourth Liberty Loan Drive with its Liberty Fair parades and rallies was not scheduled to open in Los Angeles until October 12, the day after the city council's ban became law. The closing order in Los Angeles effectively precluded the fair, thus eliminating the opportunity for the rapid spread of the illness as had taken place in San Francisco.

Treating sick Angelenos was the second priority of the Los Angeles city council. The unfortunate victims of the Spanish Influenza were told, among other things, "to stay in bed, keep the room well ventilated, eat enough plain food, but not too much," and to "keep [their] bowels open."<sup>18</sup> Recommended by City Health Commissioner Dr. Powers and paid for from funds available to the city council, this advice was printed every few days in the daily newspapers. Individuals who developed severe cases of the illness or complications due to influenza, however, needed greater care. As the *Journal of the American Medical Association* later reported, "this unknown disease kills by secondary pneumonia."<sup>19</sup> After having their bodies seriously weakened by influenza, medical complications often set in which killed the patient. By far the most

prevalent complication was pneumonia. As one Los Angeles doctor stated, the influenza appeared to run from "three to six days" if patients went to bed and stayed there from the moment symptoms appeared until full recovery, but if they did not take good care of themselves, "pneumonia was likely to develop."<sup>20</sup> Thirty-year-old Dr. Lightbourne, for example, was a California-trained physician who contracted pneumonia-related influenza. Born in South Carolina in 1888, he graduated from the University of California in 1911 and later interned at the County Hospital. Three months prior to the outbreak of influenza in Los Angeles, he took a leave of absence and drove across the country to visit his family in South Carolina. Upon learning of the desperate need for physicians in Los Angeles, however, he swiftly drove back to southern California to care for the ill. Immediately upon returning to his adopted city, Dr. Lightbourne took up his medical duties at Good Samaritan Hospital. Soon after he fell ill and later died of pneumonia-related influenza.<sup>21</sup>

Three influenza hospitals were established in Los Angeles to serve the seriously ill. They were equipped and staffed to treat patients suffering from the most severe cases of influenza and pneumonic complications and who were unable to care for themselves or their families. Of the three "special hospitals" set up within the city, one was "fitted up by the [Health] department" and maintained in the "Women's Club House" in San Pedro. Another was opened January 15, 1919, as a city quarantine hospital. The first to open, however, was located at 936 Yale Street. It was a building donated by the Board of Education and contained only 50 beds when it opened on October 17. Within days of opening, City Health Commissioner Dr. Powers urgently reported that the Yale Street Hospital was in need of 100 more beds. Influenza cases were flooding the hospital. He requested an immediate appropriation of \$10,000, which would provide salaries and equipment to expand the Yale Street Hospital.<sup>22</sup> On the day of Dr. Powers' urgent request, the city council unanimously voted to provide the needed funds. Within a week, the Yale Street Hospital had 70 patients "of the most serious sort, coming from the poorest families of the city, in most cases, and being marked by the most aggravated symptoms."<sup>23</sup> The hospital was open from October 17 until November 20 when the number of new cases reported each day to city officials dropped below 300.

The ages of those who died at the Yale Street Hospital reflected why the pandemic was viewed as such a lethal killer not only in Los Angeles, but also around the world. Typically, influenza infected and killed those in the extremes of life, the very young and the elderly. The 1918-1919 pandemic,

however, was radically different. Continuing to afflict the young and the elderly, "the age of special susceptibility" was that "of young adult life."<sup>24</sup> Lieutenant Reginald Whitaker, for example, was a civil engineer in his late twenties who eagerly volunteered for service in Europe in late 1917. Upon failing a final medical exam for unrelated reasons prior to his embarkation for France, Lieutenant Whitaker returned to southern California to begin work for the California Highway Commission. Soon after his return he fell ill with the influenza and died.<sup>25</sup> According to Department of Commerce statistics published in 1922, nearly 460,000 individuals between the ages of twenty and thirty-nine died in 1918. When this startling number is compared to the average of 171,500 who died in the United States in any given year between 1900 and 1917, it revealed that something was killing those in "young adult life" with greater ferocity in 1918. The age distribution of those who died at the Yale Street hospital supported the national statistics. Of the 94 Angelenos who died between October 17 and November 30, 57 were between the ages of twenty and forty. Only seven children under the age of ten died, and only nine people over age fifty fell victim to the illness.<sup>26</sup> Not only was influenza killing hundreds of thousands throughout the country, it cut down those in the prime of life.

Another pandemic victim cut down in the prime of his life in a different way was young Juan Rincon. After contracting influenza he became so fearful of dying from the contagion that he put a pistol to his temple and shot himself. A friend who had gone to find a doctor later found him and called the police.<sup>27</sup>

On another front, the public assembly closing ban caused unrest among some of the public in Los Angeles. Two groups vocally called for its repeal, claiming the ban was not only unconstitutional but was also seriously harming the city's economy. Fortunately, for the most part, Angelenos obeyed the law willingly until it was lifted on December 3, 1918. The most vocal opponent of the partial closing law was the Los Angeles Theater Owner's Association. Believing that the law unfairly targeted their industry, they repeatedly petitioned the city council to repeal the partial closing law. Within days of the passage of the closing order, the Owner's Association circulated a petition arguing that the "partial closing law" was failing to check the number of influenza cases in Los Angeles because the public was "permitted and encouraged to congregate in all places other than theaters, churches and schools." The petition called for the "closing of all places of business except drugstores, groceries and meat markets."<sup>28</sup> Arguing that their industry was unfairly



closed, the Theater Owner's believed that if a complete closing order were implemented, a speedier recovery could be made, which would allow all theaters to reopen sooner.

By the second week of November, Los Angeles newspapers mistakenly reported "the flu, like Prussianism," was on the wane. Bolstered by the news, the Theater Owner's Association appeared before the Los Angeles city council to protest the continued partial closing ban. The council, without advice from Dr. Powers, "took no action toward changing the order."<sup>29</sup> The council members held fast to Dr. Powers' prudent belief that a partial closing order would meet little public resistance while a complete shut down of a city of over 600,000 people would be met with broad public disapproval and thus be disregarded wholesale.

The following day, November 14, the *Los Angeles Times* reported that the San Francisco board of supervisors had voted on a "partial removal of the ban on public meetings" in all but two districts of the city. Theaters, churches, and schools would reopen immediately.<sup>30</sup> The number of new cases had dropped precipitously from 7,000 the week of November 2 to just over 600 by November 16. To the board of supervisors, lifting the ban was only logical. The Theater Owner's Association, spurred on by the San Francisco supervisors, again called on the city council to lift the partial ban in Los Angeles. The Los Angeles city council, however, again wisely voted to uphold the ban on opening. Angered, Theater Owner Association president MacDonald declared his members were being "discriminated against" and called for a full ban on opening in order to speed the recovery. President MacDonald argued "if closed theaters help stamp out the disease, closed stores, offices, no street-cars and a general shut down would stamp it out more quickly." He estimated that the theater industry in Los Angeles had lost nearly one million dollars in revenue since the partial closing ban went into effect on October 11.<sup>31</sup>

A second group opposing the partial closing ban in Los Angeles was the Church of Christ, Scientist. Less vocal in their opposition than the theater owners, the church did, however, openly defy the city ordinance on closing churches. They "attempted and partly succeed in re-opening for services" on Sunday November 4. Four members of the church's Board of Directors were quickly arrested and the church doors closed.<sup>32</sup> In subsequent court actions, church members angrily argued that the closing ban was "unconstitutional, invalid, void and an unwarranted exercise of police power in the city of Los Angeles."<sup>33</sup> The judge hearing the case fell ill with influenza and a ruling was

delayed. In another court ruling in Pasadena, however, a judge ruled in the church's favor after hearing a similar case. Still ill with influenza, the judge in the Los Angeles case released a statement declaring his intention to rule in the church's favor once he was well enough to do so.<sup>34</sup>

Redoubling their efforts in light of the court rulings, the Theater Owner's Association appealed to the Los Angeles city council to lift the ban. The question of the ban's constitutionality and the fact that the number of new cases reported in the city had dropped to under 300 during the week of November 25 gave them new hope. Discussing the matter in light of the decline in cases and the legal rulings, the city council voted to "prepare and present" an ordinance repealing the ban. After the ordinance was presented by the City Clerk, Councilman Criswell refused to vote for the repeal. Believing the number of flu cases was still too high, he dissented. As the city charter stipulated that "no ordinance shall be passed finally on the day it is introduced, but be laid over for one week unless otherwise approved by a unanimous vote," the repeal was defeated.<sup>35</sup> The council was divided. Councilman Criswell passionately argued he would not vote for repeal until City Health Commissioner Powers "asked the council to remove the ban."<sup>36</sup> City Mayor Woodman, however, joined the Theater Owner's Association and, to break "the backbone of the epidemic," called for an extension of the closing order. He called for the inclusion of all businesses except "grocery stores, meat markets, vegetable and fruit stands, bakeries and dairies" to close for a short period of time in order to limit the spread of the contagion and, therefore, speed the recovery of the city. Mayor Woodman's November 27 proposal to broaden the ban was swiftly defeated by a unanimous vote.<sup>37</sup> Only on December 3, immediately after Dr. Powers announced the conditions in Los Angeles warranted the re-opening of all public places, did the city council vote unanimously to repeal the partial closing order.

The Council debate demonstrated that there was clear disagreement about continuing with the closing ban as it was set down on October 11, repealing it all together or broadening it with the idea the city would make a swifter recovery. Exacerbating the confusing debate was the recommendation of Dr. George W. McCoy, the Director of the Hygienic Laboratory, Washington, D.C., and federal government expert on epidemics, who urged large cities like Los Angeles not to lift their closing orders. He warned that other cities like Denver, Cheyenne, and Santa Barbara, had all found it necessary to reinstate their bans after lifting them.<sup>38</sup>

Other than the constant pressure applied by the Theater Owner's Association and the defiance of the Church of Christ, Scientist, there was little opposition to the closing ban on the part of the general public in Los Angeles. As one doctor noted, "an interesting feature of the present epidemic is the change in the attitude of the public." Los Angeles citizens freely accepted and obeyed "to the fullest measure orders and suggestions as to their mode of living." Orders from city authorities were received "without panic or alarm."<sup>39</sup>

The public received orders and suggestions from authorities without panic or alarm because citizens looked upon the pandemic as another part of the war rather than a separate entity. Stories of the bloody fighting in Europe dominated city newspapers. One half of the sixteen to twenty pages printed each day were devoted exclusively to war coverage. In contrast, news of the pandemic was buried mid-way through the second section of the paper. The Spanish Influenza, while killing more people than the war machines of Europe would, was deemed less threatening and less exciting by the press and, therefore, less newsworthy. The slow but steady progress of Allied troop captured the headlines during the fall of 1918.

The expanded use of war terms like "slacker" and "calamity howler" to describe aspects of the epidemic illustrated that it was regarded by the press and the public as an ancillary chapter of the war. Slacker was a term used by the press to describe the uninvolved citizen or one who did not serve in the military services or support the nation's war effort by buying bonds, for example. The calamity howler saw doom around every corner, when considering the European war, passed on unfounded rumors, and generally contributed to public anxieties. After the outbreak of influenza, the term slacker took on the added meaning of one who went out in public while ill, coughed and sneezed openly and in the presence of others, and generally disregarded the prudent recommendations of city authorities. The calamity howler became one who spread unfounded rumors of hundreds of influenza deaths in one day and vituperated health officials' inability to minimize the spread of the contagion. One writer's reaction to the perceived unpatriotic activities of the calamity howler was to say they "should be brained and buried at public expense."<sup>40</sup> Those who presumably did not follow authority and acted against the public well-being during the epidemic were branded as being un-American in their refusal to cooperate. Specific examples of slackers and calamity howlers, however, are not found in the pages of the city's newspapers. These types of people were presumed to exist and fictitious examples of their unpatriotic activities were published as a warning to the public to conform and fol-

low authority or risk being named publicly and face ostracism. In the words of California Governor William Stephens, it was the "patriotic duty" of all American citizens to "aid in the winning of the war" by preserving the "health of himself and his fellow Americans."<sup>41</sup>

As the war in Europe neared its end in November 1918, the people of Los Angeles continued to abide by the partial closing order and respect the authority of the city council. People in San Francisco were less willing to do so. San Francisco, unlike Los Angeles, was one of the few cities in the country to implement a full masking order designed to prevent the spread of the illness. The masking order, enacted on November 1, required all people in public to wear a gauze mask over the mouth and nose to halt the spread of the contagion. Doctors in California and around the country debated the effectiveness of masking. Some argued the mask acted as a "barrier between hand and mouth," preventing infection. Critics countered that people constantly fidgeted with their masks, thus making hand and mouth contact more likely. The critics regarded the mask as being of "doubtful value" or simply "a pure fake." One doctor went so far as to say masks were "as filthy a thing as a big long mustache."<sup>42</sup>

San Franciscans generally opposed the masking ordinance and frequently violated it. Masks were a nuisance, interfering with speaking and smoking. The Church of Christ, Scientist, argued they were unconstitutional. Merchants believed masks would frighten away customers and ruin the Christmas shopping season.<sup>43</sup> In response to the frequent and open violations the police took quick action. In a series of simultaneous raids of every downtown hotel lobby on November 8, police arrested 400 individuals violating the ordinance on masking. Many were arrested with a cigarette in hand and a mask hanging around the chin or not even being worn.

Within two weeks of passing the masking ordinance, however, the number of new influenza cases reported dropped from 7,164 to less than 600. As influenza historian Alfred Crosby wrote, "rarely has evidence in support of a scientific hypothesis been more overwhelming and more deceiving."<sup>44</sup> The flu weakened in San Francisco "for reasons of its own," not due to the masking order. Doctors who opposed masks as a defense pointed to the number of cases and number of deaths in cities which had masked and those which had not revealing little or no difference in infection rates and death rates.<sup>45</sup> The influenza epidemic in Los Angeles declined rapidly after the second week of December 1918. The Christmas holidays and New Year's Eve celebrations

stimulated a brief resurgence in the number of cases that peaked at roughly 675 on January 8, 1919.<sup>46</sup> Thereafter, influenza made a slow but steady withdrawal from the city. San Francisco, even with its masking order, experienced a sharp increase in infection and death rates, nearly 3,500 cases on January 18, 1919, alone. The virus peaked in January and then slowly tapered off well into the spring of 1919.<sup>47</sup>

The swift response of the Los Angeles city officials in initiating measures to restrict the spread of the influenza virus saved the city from the astronomical infection rates experienced in San Francisco. Acting on October 11 to invoke a partial closing ban, combined with the public acceptance and the fortunate late scheduled arrival of the Liberty Loan Drive, the city was able to avert the crisis. By invoking only a partial closing ban and not requiring individuals to wear masks, city officials successfully balanced the need to protect and aid the citizenry while avoiding open resentment or apathy. The willingness of the public to comply with the influenza regulations was of the utmost importance if the measures were to have been effective. The public willingness to comply with the restrictions was made easier by the fact the country was engaged in World War One.

## NOTES

The opening quote is taken from William H. McNeill, *Plagues and Peoples* (New York, NY: Monticello Editions, 1976), 5.

<sup>14</sup>"Revisiting The 1918 Flu" on Public Broadcasting Corporation, 24 March 1997. An interview between Elizabeth Farnsworth and Dr. Jeffery Taubenberger of the Armed Forces Institute of Pathology, <[www.pbs.org/newshour/bb/health/march97/onlineNewsHour:1918influenzaepidemic-March24,19971918\\_3-24.html](http://www.pbs.org/newshour/bb/health/march97/onlineNewsHour:1918influenzaepidemic-March24,19971918_3-24.html)>.

<sup>2</sup>Andrew Nikiforuk, *The Fourth Horseman* (New York, NY: Penguin Books, 1992), 146.

<sup>3</sup>R. Gordon Douglas Jr. and Robert F. Betts, "Influenza Virus," *Principles and Practices of Infectious Diseases* (New York, NY: John Wiley and Sons, 1979), 1136-1142.

<sup>4</sup>Erik Larson, "The Flu Hunters," *Time* (February 23, 1998): 56.

<sup>5</sup>Alfred Crosby, *Epidemic and Peace, 1918* (Westport, CT: Greenwood Press, 1976), 25-26.

<sup>6</sup>Alfred Crosby, "The Influenza Pandemic of 1918," June Osborn, *Influenza in America: 1918-1976* (New York, NY: Prodist, 1977), 4.

<sup>7</sup>Dr. L. M. Powers, *Public Health: A Monthly Bulletin* (Los Angeles: Los Angeles City Health Department, October-November-December, 1918), 2. (Hereafter cited as *Public Health: A Monthly Bulletin* followed by page.)

<sup>8</sup>*Ibid.*, 2.

<sup>9</sup>"Quarantine Harbor Camp," *Los Angeles Times*, September 28, 1918, II: 4 (Hereafter cited as *Times* followed by date, section and page).

<sup>10</sup>Powers, *Public Health: A Monthly Bulletin*, 2.

<sup>11</sup>"To Wage War On Influenza," *Times*, October 10, 1918, II: 8.

<sup>12</sup>"Report Cases On Influenza," *Times*, October 9, 1918, II: 2.

<sup>13</sup>Powers, *Public Health: A Monthly Bulletin*, 2.

<sup>14</sup>"Fight Spread Of Influenza," *Times*, October 9, 1918, II: 7.

<sup>15</sup>*City Records: Ordinances*, October 11, 1918, City of Los Angeles. Vol. XII: 433. Los Angeles City Archives.

<sup>16</sup>Crosby, *Epidemic and Peace*, 1918, 105 and 109.

<sup>17</sup>"Four Thousand New Cases Of Influenza," *Times*, October 20, 1918, II: 12.

- <sup>18</sup>"Important To The Public," *ibid.*, October 1, 1918, II: 1.
- <sup>19</sup>"Organization Of Forces Against Influenza," *Journal of the American Medical Association* 71 (December 28, 1918): 2173.
- <sup>20</sup>"Closing Order A Temporary And Preventative Step Only," *Times*, October 11, 1918, II: 2.
- <sup>21</sup>"Races Home To Aid: Dies," *ibid.*, October 29, 1918, I: 5.
- <sup>22</sup>Dr. L. M. Powers to the Los Angeles City Council, October 22, 1918, Petitions. Vol. 988 (no page numbers available), Los Angeles City Archives.
- <sup>23</sup>"Flu Cases Much Fewer," *Times*, October 26, 1918, II: 1.
- <sup>24</sup>"Organization Of Forces Against Influenza," *Journal of the American Medical Association* 71 (December 28, 1918): 2173.
- <sup>25</sup>"Lieutenant Whitaker Influenza Victim," *Times*, October 15, 1918, II: 6.
- <sup>26</sup>Powers, *Public Health: A Monthly Bulletin*, 3.
- <sup>27</sup>"Prefers Bullet To Flu," *Times*, October 20, 1918, II: 6.
- <sup>28</sup>Theater Owner's Association to the Los Angeles City Council, late October, early November 1918, Petitions. Vol. 988. Los Angeles City Archives: Petitions.
- <sup>29</sup>"May Lift Influenza Ban Soon," *Times*, November 13, 1918, II: 3.
- <sup>30</sup>"San Francisco Lifts Ban Against Theaters," *ibid.*, November 14, 1918, II: 8.
- <sup>31</sup>"May Lift Ban Thursday," *ibid.*, November 15, 1918, II: 1.
- <sup>32</sup>"Defy 'Flu' Rule; Arrested," *ibid.*, November 4, 1918, II: 1.
- <sup>33</sup>"To The Supreme Court," *ibid.*, November 5, 1918, II: 1.
- <sup>34</sup>"Scientists Ask To Open In Pasadena," *ibid.*, December 10, 1918, II: 2; "Scientists Of Pasadena Win," *Ibid.*, December 12, 1918, II: 2.
- <sup>35</sup>*City Records: Minutes*. November 25, 1918, City of Los Angeles, Vol. XII: 641–642. Los Angeles City Archives.
- <sup>36</sup>"To Open Monday—Maybe," *Times*, November 21, 1918, II: 2.
- <sup>37</sup>*City Records: Minutes*. November 27 and 29, 1918, City of Los Angeles, Vol. XII: 657–658, 665. Los Angeles City Archives.
- <sup>38</sup>Dr. John R. Haynes to the Los Angeles City Council, December 2, 1918, Petitions, Vol. 988, *ibid.*
- <sup>39</sup>"The Present Epidemic Of Influenza," *Journal of the American Medical Association* 71 (October 12, 1918): 1223.
- <sup>40</sup>"Fighting 'Flu' In Los Angeles," *Times*, October 13, 1918, II: 1.
- <sup>41</sup>"Governor Urges All To Combat Epidemic," *ibid.*, October 23, 1918, II: 6.
- <sup>42</sup>"Organization of Forces Against Influenza," *Journal of the American Medical Association* 71 (December 28, 1918): 2176.
- <sup>43</sup>Crosby, *Epidemic and Peace*, 1918, 105 and 109.
- <sup>44</sup>*Ibid.*, 112–114.
- <sup>45</sup>Crosby, "The Influenza Pandemic of 1918," 11–12.
- <sup>46</sup>Powers, *Health Bulletin: A Monthly Review*, 7.
- <sup>47</sup>Crosby, *Epidemic and Peace*, 1918, 114.