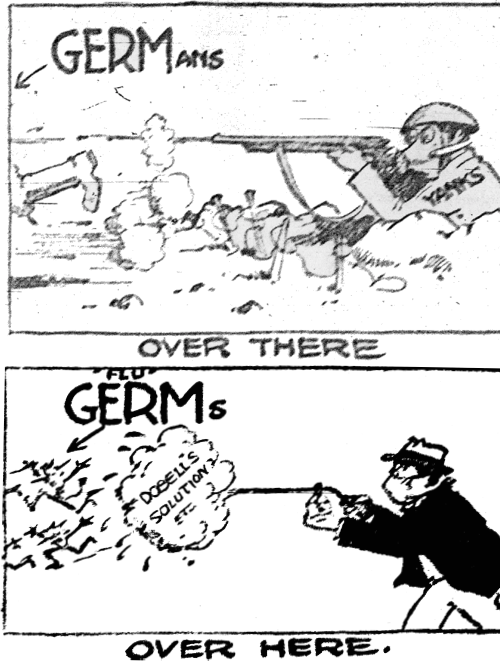


THE 1918 SPANISH INFLUENZA, BERKELEY'S "QUINTA COLUMNA"

Rex W. Adams



Oakland Tribune,
October 17, 1918.

Author's note: The influenza epidemic of 1918 was a disaster of international proportions. Indeed, as Fred van Hartesveldt notes, “[i]nfluenza undoubtedly killed more in one-fifth the time than World War I’s soldiers managed with all their machine guns, poison gas, and rapid-fire artillery.”¹ The world-wide death toll of the epidemic has been estimated at somewhere between 20 and 40 million. Spanish Influenza has even been held responsible for crucial developments in the Great War. Dr. Woods Hutchinson, a local physician, argued for a Berkeley audience that “it is due to this disease that the German offensive was held up for two weeks last spring, giving our American boys a chance to do their fine work at Chateau-Thierry.”²

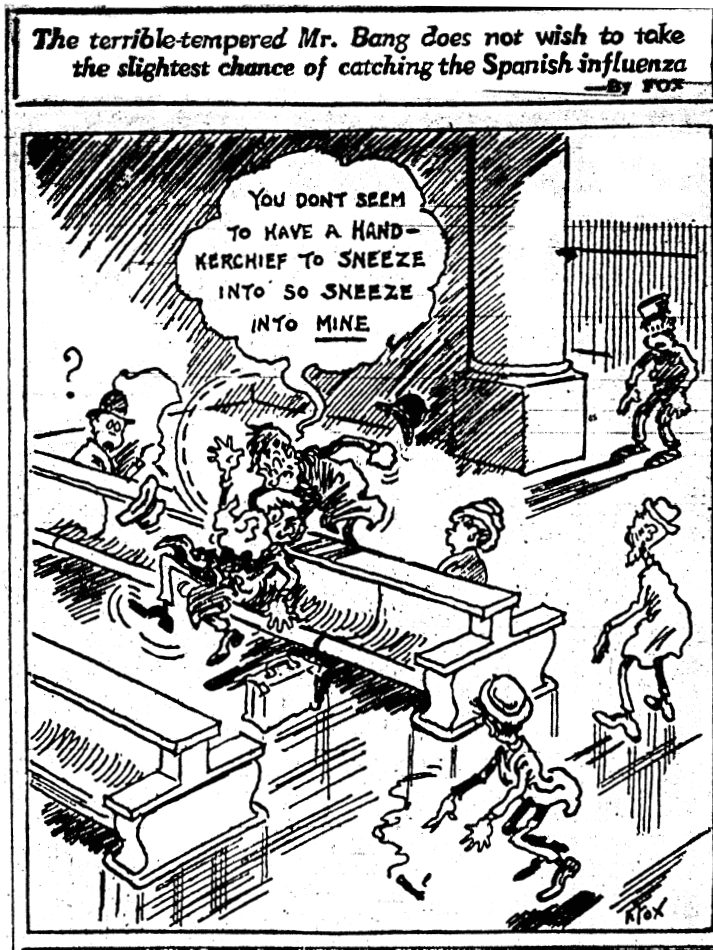
The epidemic came to the University of California in three waves, the first and most serious in October and November of 1918. During this period almost a quarter of the campus community contracted the disease. It resurfaced briefly in December and again in January, causing Spring semester to be delayed by two weeks. Though the State Hygiene Laboratory on the university campus developed a vaccine in late October by using blood donated by Berkeley students, the serum was distributed first to the military camps and secondly to students and by the time it was made generally available, the epidemic had largely run its course.³

FALL SEMESTER, 1918. Over the summer break, the University of California had set about doing its part to make the world safe for democracy. Students and faculty returning to Berkeley found themselves encouraged to volunteer in military training units and a Red Cross division was established at the University. A writer to the campus newspaper remarked on

the altered campus,

With the first week of college over it may be well for us to pause a moment and consider what is happening. In a surprisingly short time the University has become virtually a military camp. This time next week will probably see a great many, if not all of the men housed in barracks and with a good start in the work of the Students' Army Training Corps or Naval Unit . . . To the casual observer, it would seem that University life had not changed very greatly. Yet the change has been great. Those who are in touch with the main arteries of our University life realize that this is true.⁴

With its "main arteries" engaged with patriotic sentiment and activity, still the pulse of campus life beat steadily on. The *Daily Californian* notes, "we have successfully held our customary Freshman Rally, the classes have met and organized, and we have a football team training in the field."⁵ Yet even as American soldiers went over the top to face the certainty of German fire in Europe, men and women on the home front would come to fear an invisible enemy, one as likely to arrive on the breath of a friendly "hello," or the lips of the next lover's kiss, as to mingle anonymously in crowded classrooms, lecture halls and theaters. A microscopic virus would affect the University in a way that a world war could not. The most serious influenza



Oakland Tribune, October 12, 1918.

epidemic to date would witness university buildings converted into make-shift hospitals, a segment of the campus quarantined, women students working as assistant nurses and "flu mask" manufacturers, public activities curtailed, classes canceled and spring semester delayed. The Spanish flu found a university knuckling down to fight a distant crusade. Within weeks of its arrival, this fifth column, the influenza virus, had outdistanced the foreign threat and become itself the focus of the campus' struggle.

Two airmen arriving from the east coast and entering the campus with the returning students, brought with them an unsuspected stowaway. On October 6 they fell ill and the university medical staff diagnosed Spanish influenza. The airmen were duly placed in the small university infirmary for isolation and treatment. But the flu of 1918 was particularly virulent and three days later seventeen people had contracted the disease.⁶ Within a week, 68 had taken ill on campus and the numbers continued to mount.⁷ In all, estimates suggest that somewhere between 1200 and 1400 people contracted the disease at the University during October and November,

INFLUENZA

SYMPTOMS AND PREVENTION

I. GAUZE MASKS.
All students and employees are required to wear gauze masks while attending classes or while inside any of the University buildings.

II. COLDS.
No student or employee is permitted to attend any University exercises of any nature who is suffering from a cold, or who has any of the symptoms of influenza.

III. CARE OF MASKS.
(a) Boil the mask every night for five minutes and dry thoroughly.
(b) Be careful to keep the **outer** side of the mask (marked) away from your face.
(c) If possible, provide yourself with several masks.
(d) Provide a receptacle for your mask—such as a piece of cloth, which can be boiled or destroyed.

IV. SYMPTOMS OF INFLUENZA.

Fever.	Sore throat.
Headache.	Cough.
Backache.	Nausea.
Pains in muscles, bones, joints.	Prostration.
A hard cold.	

PROSTRATION may be the chief symptom.

V. HOW TRANSMITTED.
By the secretions of the nose, mouth and throat, especially in sneezing, coughing, or talking.

VI. HOW TO AVOID SERIOUS CONSEQUENCES.
(a) Act intelligently, but do not become alarmed. FEAR reduces your resistance.
(b) Take out-door exercise.
(c) Avoid over-work.
(d) **KEEP AWAY FROM ALL CROWDS.**
AVOID STREET CARS as much as possible.
DO NOT ATTEND ANY PARTIES OF ANY NATURE.
(e) Gargle and wash nasal passages with a solution such as Lister's, one part to water three parts, or same proportion of Dobell's.
(f) **GO TO BED AT ONCE** if you feel sick—take no chances. This is the best way to avoid PNEUMONIA.
INFLUENZA IS A PERSONAL CONTACT DISEASE.
DO YOUR PART TO STOP THIS EPIDEMIC.
By direction of
BENJ. I. WHEELER
President

Berkeley, October 21, 1918.

Daily Californian, October 24, 1918

"Give Us Beds, Bedding," Is the Plea of Flu Hospital



Emergency Wards in Care of 100 Patients Today

With patients coming in throughout last night as the tide of one event has been imitated, the emergency influenza hospital in the Municipal Auditorium established by the city, county and Red Cross, under the management of

This picture shows a section of the Oakland auditorium that was converted into a hospital for the care of sufferers from Spanish influenza. *Oakland Tribune*, October 24, 1918.

the peak of the epidemic. President Benjamin Ide Wheeler, in his *Annual Report* of that year, would record that the flu had claimed the lives of 20 students (two of whom were assistant nurses) and a faculty member.⁸

Influenza spread first among the ranks of the S.A.T.C. (Students' Army Training Corps). Only eight days after the first diagnoses, 45 members of the S.A.T.C., the Naval Unit and the School of Military Aeronautics fell ill. Their numbers quickly overwhelmed the small campus infirmary and the Zeta Psi fraternity house had to be commandeered to accommodate the overflow. In spite of this dramatic spread of infection, the *Daily Californian* continued to report, as it had

from the beginning, that the epidemic was under control and even decreasing.⁹ Yet as October progressed, with 468 students ill, seven dead, and military barracks, Stiles Hall, Hearst Hall and Harmon Gym converted into temporary infirmaries, no one could ignore the serious threat posed by the virus. On October 22, the commanding officer of the S.A.T.C. took action to localize the disease by ordering all unit members quarantined.¹⁰ The S.A.T.C. was not to leave the campus premises, though they could mingle freely with the rest of the student population.

Even this caveat to the general quarantine could not mitigate the situation for S.A.T.C. students who had already given up much of ordinary civilian life and who were now, by virtue of the quarantine, singled out as dangerous acquaintances for their fellow students. The rest of the campus, however, rallied to their support. At least one student, noting that the quarantine coincided with the football season, advocated that the S.A.T.C. be provided with free tickets to home games asking, “[i]s it fair that men in uniform should be required to part with their day’s wages in order to see one of Cal’s football games when...the games are absolutely the only form of entertainment in which the men can indulge?” The Student Store expanded its lines of merchandise to accommodate men who could no longer shop in downtown Berkeley. The *Daily Californian* notes,

There is very little in the way of toilet articles which can not now be procured without leaving the University grounds and the quarantined soldiers are proving excellent customers.... To accommodate the distressed soldiers who peer longingly through Sather Gate but dare not venture beyond in search of necessities, the Students’ Store has established a messenger service to attend to the off-campus business of the S.A.T.C.¹¹

**SURGEON GENERAL ISSUES ORDERS
REGARDING SPREAD OF INFLUENZA**

Owing to the prevalence of Spanish Influenza in the army camps, Brigadier-General Charles Richard, acting surgeon general of the United States army has issued the following twelve suggestions for avoiding the disease:

1. Avoid needless crowding—influenza is a crowd disease.
2. Smother your coughs and sneezes—others do not want the germs which you would throw away.
3. Your nose, not your mouth, was made to breath through—get the habit
4. Remember the three C’s—a clean mouth, clean skin, and clean clothes.
5. Try to keep cool when you walk and warm when you ride and sleep.
6. Open the windows—always at home at night; at the office when practicable.
7. Food will win the war if you give it a chance—help by choosing and chewing your food well.
8. Your fate may be in your own hands—wash your hands before eating.
9. Don’t let the waste products of digestion accumulate—drink a glass or two of water on getting up.
10. Don’t use a napkin, towel, spoon, fork, glass or cup which has been used by another person and not washed.
11. Avoid tight clothes, tight shoes, tight gloves—seek to make nature your ally not your prisoner.
12. When the air is pure breathe all of it you can—breathe deeply.”

CHARLES RICHARD.

Brigadier General, Medical Corps, Acting Surgeon General, U. S. Army

Daily Californian,
October 17, 1918.

INFLUENZA DIET

DIRECTIONS FOR FEEDING INFLUENZA PATIENTS

Diet During the Fever Period

The patient must be induced to eat more than his reduced appetite usually demands. Liquid, or semi-liquid food only must be given at least every four hours.

1. The basis of the diet is milk, supplemented by sugar and starch. The latter may be given in toast, starch and bread puddings, cereal mushes and gruels. Ice-cream may be given two or three times a day if desired.

2. No coarse vegetables or fruit fiber should be given but purees of spinach, asparagus, peas, carrots may be given in the form of milk soups.

3. Meat broths are of little value, and cannot be relied upon as conveying nutrition. They may be given occasionally for variety.

4. Sugar should be added plentifully to mushes, fruit juices, pudding, and even to the milk given as a drink.

5. Fruit juices, well chilled, are refreshing and valuable. Orange, apple, logan-berry, grape juice and lemonade are all equally satisfactory.

6. Egg-nogs and custards may be given if desired. There is, however, no imperative necessity of adding eggs to the diet during the fever.

No other foods than those mentioned should be used. Do not experiment with the patient's digestion during the critical period.

Diet During Convalescence

When the patient's temperature

becomes normal, egg dishes, simple vegetable salads, with plenty of oil dressing, broiled or boiled lean meats and fish, bacon, rice, baked and mashed potatoes, macaroni and fresh fruit may be added to the diet advised for the fever period.

Menus for Convalescents

Breakfast: (1) Oatmeal, cornmeal, cream of barley, wheat, etc., milk or cream; (a) milk toast with butter or oleomargarine; (3) orange, melon or ripe bananas; (4) weak coffee or tea in moderate amounts with plenty of cream and sugar if the patient desires it, may be allowed. Cocoa or chocolate made with milk if tea or coffee is not demanded.

Luncheon and Dinner: (1) a vegetable milk soup; (2) mashed or baked potatoes, or creamed macaroni and cheese, or rice; (3) toasted bread or muffins, with butter or oleomargarine; (4) tomato, asparagus, lettuce, or artichoke salad with plenty of oil dressing; (5) an egg omelet, souffle, or custard, or broiled lean meat or fish, such as lamb chops, beef steak, sole, or a creamed dish such as creamed codfish; (6) ice cream or a frozen custard.

Not all of these varieties of food need be given at a single meal. A combination of any three of six classes, providing class five is represented, will usually suffice.

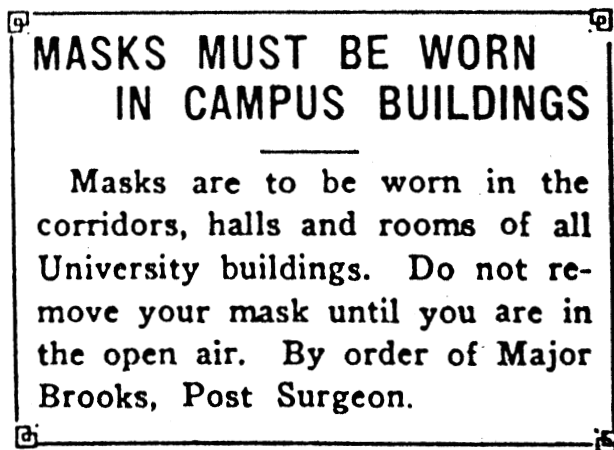
A glass of milk, ice cream, custard, or cup of cocoa, should be given in the between-meal periods and at night.

Daily Californian, October 25, 1918.

As the quarantine entered its third week, Professor S. J. Hume, Director of the Greek Theatre, organized a "vaudeville" performance for the S.A.T.C. Student musical numbers and skits, along with three short films, entertained the student-soldiers in "one of the most enthusiastic gatherings ever assembled in the classic amphitheater."¹²

In the meantime, the contagion spread to regular students and faculty members. Dr. Robert Legge, the university physician and Professor of Hygiene, fell ill while attending to flu patients and a military doctor had to replace him for the remainder of the epidemic.¹³

Professor Gayley contracted the disease in mid October and had to postpone his lecture series on "The Ideals of the Present War."¹⁴ President Wheeler and Berkeley health authorities placed a ban on all public gatherings, including student clubs, activities, and a performance by Lucien Muratore, "the world's greatest tenor."¹⁵ Finally, class attendance flagged and instruction languished. With the increasing absences due to illness, Wheeler recommended a moratorium on new assignments for ten days at the end of October. The President suggested that the time be used "mainly for review and individual assistance" to keep large numbers



Daily Californian, October 23, 1918.

of students from falling far behind.¹⁶ With Fall Semester yet half underway, the University's vital functions had come as close to a complete shutdown as any natural disaster would ever bring them.

Contemporary doctors knew relatively little about preventing, containing or even treating the disease. As Van Haresveldt notes, "[u]nfortunately for the ill of 1918, the improvements in treatment had only gotten as far as reducing the likelihood that the physician would harm the patient by his actions."¹⁷ This did not prevent

the medical world and the media from extolling a colorful array of preventatives and treatments. The "influenza diet" appeared in every Bay Area newspaper, along with recommendations to avoid fear and tight clothes, and to seek and inhale deeply fresh, clean air.

Perhaps the most noteworthy, and certainly the strangest, preventative measure witnessed by the campus was the appearance of the "flu masks" on October 21. A day before the S.A.T.C. quarantine order, President Wheeler mandated the wearing of influenza masks on campus (a common step taken to combat the flu around the world, the cities of Oakland, Berkeley and San Francisco would follow suit in a matter of weeks).¹⁸ "Students in attendance on classes within the University buildings must wear gauze masks, likewise those reading in the library. The help of you all is asked in the enforcement of this order."¹⁹ The sight of students, professors and administrators strolling past Sather Gate, attending such classes as were held and seeing to the university's daily affairs seems to have affected onlookers almost as profoundly as the presence of the virus itself. One writer notes the "ghostly appearance" that the masks gave to the campus at night.²⁰ Other students, echoing the political rhetoric of the day, remarked on the "democratic" aspects of mask wearing.

It was rather an unusual sight to see people go about the campus yesterday, trying to decide whether the persons in front of them were or were not acquaintances. No doubt several unintentional "snubs" were given and probably some may have thought a wildly democratic fever had suddenly seized every member of the University. Some of us found ourselves in amusing situations. Few of us stopped to consider the serious side of the order issued to wear masks.²¹

The masks seemed to offer the greatest safeguard against infection, yet their "democratizing" function eerily mirrored the flu's own morbid democracy. Aside from afflicting most intensely those between twenty and thirty years of age (the most populous group on campus), the flu was essentially indiscriminating.²² The university mass-produced masks for

its members in a race to overtake an enemy replicating itself with equal fervor. Infection and masks became peculiar leveling agents, the one mingling undiscerningly among students and faculty, and the other producing a kind of "democratic" anonymity. One rhymester quipped,

*Floo Masks have their good points, too,
Of which I'll enoomerate a few.
They mingle on a equal basis
All females, no matter what their faces.*

He then switches to a somewhat darker tone,

*One Prof. I know with a squeaky voice
Has a class what wears these masks by choice.
Beecause they thus can safely shriek
And laff at each new funny squeek.*

*O fokes, this is a funny erth,
Into which you have give me birth,
We go around like muzzled dogs,
And snort and breathe and act like hogs.
O I look up to Parrydise
Where peepul breathe and all iz nice.²³*

Most of the campus seems to have complied with the mask ordinance, yet the number of diatribes against "mask slackers" to appear in the *Daily Californian* indicates a not insignificant resistance, at least among students. A day after the mask order at the University, an editorial cites that "many of the students have even dispensed with their masks for protracted periods during recitations."²⁴ Another student asks rhetorically, and somewhat hysterically, why people are allowed to attend classes without their masks, "is it because some people do not understand the serious character of the situation upon the campus, or is it another instance of selfish indifference on the part of a small group of individuals?"²⁵ These answers may indeed indicate the motivation of some students, but others undoubtedly resisted the identity effacing masks as a way of asserting their individuality, of taking some, albeit negative, power into their own hands. Another letter to the *Daily Californian* observes,

Since the ordinance requiring that everyone wear a mask has been in force most people have had to obey at least the letter of the law. But many have missed or ignored the spirit and are still evading the law in every possible way as though it were a sign of superiority to disregard it.

And so on all sides we see little useless masks the size of a postage stamp, and masks worn on the chin and neck.²⁶

When city councils adopted mask ordinances they imposed severe penalties for non-compliance. Oakland established a 300-person special police force to coerce its citizens to wear their masks. The "mask cops" were to take down names of violators who, if they persisted, would be subject to \$5 - \$100 fines and/or jail sentences.²⁷ In Berkeley, mask fines could range up to \$500. Two days after the Berkeley mask ordinance went into effect, 171 men and 4 women had been arrested as "mask slackers."²⁸

Sometimes crises produce heroes. The unsung heroines of the 1918 influenza epidemic at Berkeley were the university women. Lucy Stebbins, the Dean of Women who four years earlier

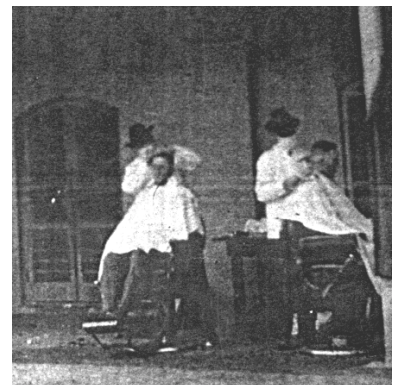


Daily Californian, November 1, 1918.

had spearheaded the development of the Home Economics Department at the University, organized the mobilization of women students and encouraged them in the manufacture of flu masks.²⁹ In total, 648 women students (about a fifth of all women students at the University) labored to produce 23,991 gauze masks during the height of the epidemic.³⁰ Working tirelessly, they manufactured 8,300 within the days of Wheeler's injunction that masks be worn.³¹ Wives of faculty members assisted in the effort of both creating the masks and manning the distribution booths established at Wheeler Hall, Hearst Hall and the Library.³² Three hundred twenty women students volunteered as nurses' aids or to do maintenance work in the sick room.³³ Two of these students themselves became ill and died as a result of this work, and the single faculty member to succumb to the flu was Stebbins' colleague in the Home Economics Department, Ethel Taylor.

At its height, Spanish influenza infected a number approaching a quarter of the total campus population. But like the flu masks, the use of figures (bodies or sickbeds) to qualify the impact of a disaster inevitably obscures individual human tragedies which, after all, are ultimately what gives these events their significance. Among the most poignant personal experiences to come to us from the 1918 influenza epidemic at Berkeley was that of Walter Steilberg, professor of structural engineering. A survivor himself, Steilberg lost his wife, his mother and his infant daughter to the epidemic. Mrs. Helena Lawton, Steilberg's daughter, recalled these events in an addendum to her father's oral history:

There was a service for her [Steilberg's wife] and the brief text, read by Dr. John Wright Buckham, stressed that one life is often sacrificed in order that another one may survive. That other life [Steilberg's newborn daughter] . . . was extinguished only two days later, as was that of Walter Steilberg's mother shortly afterwards. Losing himself in work was his panacea, and this was so for the rest of his life.³⁴



Students receiving haircuts from masked barbers outside the ASUC store in the basement of North Hall, November 1918. *Courtesy of University Archives.*

NOTES

- 1 Fred van Hartesveldt, *The 1918-1919 Pandemic of Influenza: The Urban Impact in the Western World* (Lewiston, 1992), 2.
- 2 *Daily Californian*, October 28, 1918.
- 3 *Daily Californian*, October 28, 1918, and the *Oakland Tribune*, October 24, 1918.
- 4 *Daily Californian*, October 7, 1918.
- 5 Ibid.
- 6 For brief summaries of the epidemic at Berkeley see Harvey Helfand, *An Architectural History of Ernest V. Cowell Memorial Hospital at the University of California Berkeley* (The Bancroft Library, 1992). See also *The University of California Chronicle*, 21 (January 1919), 5.
- 7 *Daily Californian*, October 14, 1918.
- 8 President, *Annual Report . . . 1918-1919*, 22-24. Cited in Verne A. Stadtman, *The University of California 1868-1968* (New York, 1970), 196. See also Helfand, *Cowell Memorial Hospital*, 18.
- 9 *Daily Californian*, October 14, 1918.
- 10 *Daily Californian*, October 22, 1918. The quarantine would last until November 11.
- 11 *Daily Californian*, October 29, 1918.
- 12 *Daily Californian*, November 4, 1918. The three films shown were "Bridge of Ships," "Of no use to Germany," and "Out West."
- 13 *University of California Chronicle*, 21 (January 1919), 5.
- 14 *Daily Californian*, October 16, 1918.
- 15 Ibid.
- 16 *Daily Californian*, October 28, 1918.
- 17 Van Hartesveldt, *Pandemic*, 4.
- 18 *Daily Californian*, October 30, 1918.
- 19 *Daily Californian*, October 21, 1918.
- 20 *The California Alumni Fortnightly*, 12 (February 1919), 19.
- 21 *Daily Californian*, October 22, 1918.
- 22 *Daily Californian*, October 28, 1918.
- 23 *Fortnightly*, 12 (February 1919), 19.
- 24 *Daily Californian*, October 22, 1918.
- 25 *Daily Californian*, October 23, 1918.
- 26 *Daily Californian*, November 11, 1918.
- 27 *Oakland Tribune*, October 26, 1918.
- 28 *Daily Californian*, November 1, 1918.
- 29 Verne A. Stadtman, ed. *The Centennial Record of the University of California* (Berkeley, 1967), 83, describes Stebbins' activities as Dean of Women. For her role in the influenza epidemic see various articles in the *Daily Californian* between October and November of 1918.
- 30 *The Centennial Record of the University of California* indicates that there were 3400 women at the

University in 1918-19, including graduate and undergraduate students. The number of masks and participating students is printed in *The University of California Chronicle*, 21 (January 1919).

31 *Daily Californian*, October 22, 1918.

32 *Daily Californian*, October 21, 1918.

33 *The California Alumni Fortnightly*, 12 (March 1919), 67.

34 From *Julia Morgan History* [a transcription from oral sources], 1 (The Bancroft Library), 252.