The History of the Twentieth Century Episode 172 "Pale Horse, Pale Rider II" Transcript

[music: Fanfare]

"The road to death is a long march beset with all evils, and the heart fails little by little at each new terror, the bones rebel at each step, the mind sets up its own bitter resistance, and to what end? The barriers sink one by one, and no covering of the eyes shuts out the landscape of disaster, nor the sight of crimes committed there."

Katherine Anne Porter, "Pale Horse, Pale Rider."

Welcome to The History of the Twentieth Century.

[music: Opening Theme]

Episode 172. Pale Horse, Pale Rider, part two.

In last week's episode, I described the first documented outbreak of the 1918 influenza at Camp Funston, in Fort Riley, Kansas. Thousands of soldiers grew ill; 46 died. That's an unusually high death rate for influenza, which is typically not fatal.

Now, you've probably had influenza yourself. You know how it goes. A person sick with influenza is typically bedridden for three or four days with a high fever. Then the fever breaks, but the patient can expect to feel weak and tired for an additional one to two weeks before fully recovering.

A small percentage of influenza victims die from the disease, or from some secondary infection brought on by the disease. In the years leading up to 1918, an outbreak of influenza might claim the lives of as many as one out of every thousand infected. Thankfully, this number is even lower in our time. Those at the highest risk of complications from influenza are smokers, people with other diseases of the lungs and respiratory system, and those with compromised immune systems. In this last group, we can include the very young and the very old, whose immune systems are typically not in prime condition. For young and healthy people, like say, those soldiers at Camp Funston, the death rate should be significantly lower than one out of a thousand. But instead, we observe a rate closer to ten or twenty out of a thousand, and this among a class of people who could be expected to be more likely to survive than the general population. You may take this as foreshadowing.

By the beginning of April 1918, influenza was spreading across the central United States and began appearing in the port cities of the Northeast, where US soldiers were hastily embarking for France. Soon it was turning up in Brest, where the Americans were debarking. By the middle of April, an unusually warm April this year, soldiers on both sides of the Western Front were falling ill by the hundreds of thousands.

It was spectacularly bad luck for the German commanders, Hindenburg and Ludendorff that this was the month of the fateful German spring offensive, when they were hoping to take advantage of Germany's temporary numerical superiority in the West to launch what was hoped to be the final offensive of the war. But Germany's numerical advantage was blunted by the sudden surge in influenza casualties, which sickened perhaps half of all soldiers on the Western Front. Erich Ludendorff would later blame the failure of the offensive on the influenza epidemic, although we should take this claim with a healthy dose of skepticism, since Ludendorff was always quite adept at blaming someone or something else whenever anything went wrong.

Soon the epidemic had spread to Britain and Italy. By May, it had reached Spain, where it sickened the Spanish King Alfonso XIII, and his prime minister, and a good number of the Spanish Cabinet. The sudden illness of most all of Spain's top leadership all at the same time garnered a lot of press attention in Spain. Spain was a neutral country and had no wartime censorship. So while military censors in all the belligerent nations were keeping the influenza epidemics sweeping their militaries a secret, there was no secrecy in Spain. There was merely shock and confusion, as Spanish newspaper headlines blared the news of this royal epidemic sweeping across the country. What had happened? As late as June 1918 the Royal Academy of Medicine in Madrid was being told there was no evidence of this new influenza appearing anywhere in the world outside of Spain. It was quite the medical mystery.

In fact, the epidemic was probably carried into Spain by Spanish and Portuguese civilian laborers returning home from war-related work in France. Eight million Spaniards fell ill from influenza and the national shock and confusion that followed became an international news story, dutifully carried by newspapers in countries that were dealing with their own outbreaks that were being kept from the public. And this is the reason why, much to the regret and annoyance of Spaniards then and Spaniards now, the 1918 influenza pandemic is almost universally known as the "Spanish flu," even though Spain had nothing to do with it, apart from the fact that Spanish people suffered from it along with everyone else.

Calling it the "Spanish flu" helped satisfy that human need I talked about in last week's episode, to blame epidemics on foreigners. In truth, though, the only nation that has the right to blame

Spain for the epidemic is Portugal, since the disease entered that country through Spain. The Spanish sometimes referred to the epidemic as the "French flu," and they had better cause to call it that than we do to call it the "Spanish flu," but still, that name never caught on.

The Spanish government began disinfecting trains entering the country, including trains from Portugal, even though Portugal had contracted the disease from Spain, but that's epidemic logic for you. But they sprayed disinfectant around the palace of the national Congress of Deputies in Madrid as well, so don't be too offended, Portugal. These disinfectant sprays were entirely ineffective against influenza anyway, which the Royal Academy of Medicine was trying to explain to the government, but there it is. Again, that's epidemic logic for you.

Meanwhile, the influenza virus continued to spread. Also in May, while the Spanish were puzzling over what was apparently an epidemic unique to their own country, cases of influenza were appearing in eastern Germany, in Poland, and at the Russian Black Sea port of Odessa. Under the terms of the peace treaty between Germany and Russia, signed earlier in the year, Germany was supposed to begin repatriating Russian prisoners. The Germans let go of ablebodied Russians only reluctantly; their labor was still needed for the war effort. But the sick and the wounded they gave up gladly, and of the thousands of prisoners returning to Russia during this period, some of them surely brought the influenza virus along with them.

Also in May, the disease appeared in North Africa, in India, in Southeast Asia, in Japan, and in China, where some 20,000 people in the port city of Tianjin were stricken.

The following month, June, marked the beginning of summer in the Northern Hemisphere, and this is point when the epidemic began to wane. Influenza is a seasonal disease; it strikes most often in winter, for reasons that we still don't understand in our time. The same seasonal pattern holds for the common cold. It may be because people spend more time indoors and closer together in winter, or that the drier air of wintertime allows the virus to survive longer in the environment or pass more efficiently from one person to the next. The seasonal nature of cold and flu outbreaks has led to a common belief that it is exposure to cold itself that causes these illnesses, but that is not the case. These are viral infections.

Whatever the reason, this epidemic followed that pattern and faded away in the Northern Hemisphere, although there was an outbreak in Australia in July, which corresponds to winter in the Southern Hemisphere, and this moment marks the end of the first wave of the 1918 influenza pandemic. This particular virus had shown itself to be more serious than the usual influenza, and no doubt doctors all over the world breathed sighs of relief as the numbers of cases shrank.

Unfortunately for them and for all the world, this is not the end of the pandemic. To the contrary, this virus is just getting started.

[music: J.S. Bach, Toccata in D minor]

Not many people were thinking about influenza in Europe during the summer of 1918. They were thinking about the war. But it seems the virus had not completely disappeared. The Turkish general, Mustafa Kemal, the hero of Gallipoli, visited Germany that summer, accompanying the Ottoman Crown Prince and soon-to-be Sultan Mehmed VI. Kemal visited the Western Front, inspected the German positions, and returned to Berlin to report to Kaiser Wilhelm personally his view that the war was lost. That must have been an unpleasant meeting, but worse still for Kemal, he came down with influenza on his way back to Constantinople and had to layover in Vienna for a time until he recovered.

Influenza broke out in prisoner-of-war camps in Switzerland that same month. Switzerland was neutral, but from the early days of the Great War, at the urging of the International Committee of the Red Cross and the Swiss government, the belligerent nations agreed to transfer sick or wounded prisoners of war to Switzerland to be repatriated. Now technically, under international law, only military personnel who were too badly sick or wounded to return to military serve were eligible for repatriation, so many of these POWs were simply held in Switzerland, and by the way, one of these Swiss POW camps was administered by a 43-year old Swiss psychoanalyst named Carl Jung.

As the war went on, enforcement of the rules eased, and by 1918, most prisoners held longer than 18 months were being released, and family and friends of prisoners were permitted to come and visit their loved ones in Switzerland. Even so, almost 70,000 POWs and internees were held in Switzerland over the course of the war, and large numbers of people in close quarters, especially people already sick or wounded, spell danger. By early August, French POWs returning from Switzerland were not only becoming gravely ill, but dying. The French blamed the Swiss, who in turn pointed to Germany and Austria as the source of the outbreak.

By late August, influenza had reappeared in the French port city of Brest, in Freetown, Sierra Leone, and in Boston, Massachusetts. It seems that the flu spread outward from France, probably aboard British and American naval vessels, but we can't say for certain, because this new epidemic is advancing rapidly.

Now, it is very unusual to see an influenza epidemic in summer, but that's not the only thing unusual about this second wave. The virus had by now mutated into a much more virulent and deadly form. As I mentioned before, it's usually the very old and the very young who have the most to fear from influenza, but this new version of the virus was most lethal to those in the prime of their lives, those in their twenties and thirties, the very people who, in an ordinary influenza epidemic, would have been the most likely to survive. Pregnant women who contracted the flu frequently miscarried or delivered premature or stillborn infants. Children born to mothers who had the flu while pregnant exhibited higher rates of disabilities and lower educational attainment. The second wave was far more dangerous and deadly than the first, and far more so than is typical for influenza. Yet we know this was the same virus because those who had already contracted it during the first wave were immune to the second wave. So how did this dreadful second wave come about? It seems likely the Great War itself, with the fighting in the trenches and the close quarters and the poor hygiene these conditions engendered allowed the virus to mutate into a more virulent form which was then carried by soldiers into civilian populations.

One of the early victims of the second wave was the US Assistant Secretary of the Navy, the now 36-year old Franklin Delano Roosevelt, who had just spent two months in France and was returning to the US in early September aboard the American troop ship SS *Leviathan* (which sixteen months ago had been the Hamburg-Amerika passenger liner *Vaterland*.) Roosevelt fell ill during the return voyage and by the time the ship reached New York, he'd had to be carried ashore on a stretcher.

Later in the month, that same ship transported 9,000 American soldiers from Hoboken to France. By the time the ship arrived in Brest, 2,000 of the soldiers were sick with the flu, and ninety had already died.

The outbreak in Freetown spread into the interior of West Africa and also southward along the African coast, reaching Cape Town in South Africa by September, and from there north along the east coast of Africa. It also reached India in September sickening Mohandas Gandhi among many others. It reached China in November. The 26-year old Regent of Ethiopia and future Emperor Haile Selassie contracted the disease in Addis Ababa, a city that had at that time only one hospital and eight physicians. Two of those eight physicians died of the flu along with 10,000 others in the city.

In Europe, the disease impacted French military operations in the final days of the war. In Germany, Erich Ludendorff grasped at this straw in one final, forlorn hope that somehow the influenza epidemic would cut short the Allied offensive. It did not, although it did slow it down. In October 1918, US General John Pershing sent a series of increasingly desperate telegrams to the War Department, begging for more field hospitals, more nurses, and more medical supplies to deal with the disease sweeping through his ranks. Ludendorff's hopes were crushed when the epidemic crossed into Germany, crippling his own already-reeling army and incapacitating even the 59-year old Kaiser Wilhelm.

In Vienna, the flu struck the 37-year old Jewish Bohemian writer Franz Kafka, who watched the Austrian Empire collapse from his bedroom window during his convalescence. A 20-year old Jewish Hungarian army officer named Leo Szilard was sent home from the front when he came down with the flu. During his illness, he received the news that his regiment had been all but wiped out at the front, meaning the disease had probably saved his life. Szilard will go on to become a key figure in the development of nuclear power and nuclear weapons, but that's a story for another time.

In London, where the Ballets Russes was performing, their principal male dancer, the now 21year old Leonid Massine reacted with horror to the news that the police officer assigned to the theater had died in the epidemic. Massine himself did not fall ill, but he worried that his performance in *Cleopatra*, wearing only a loincloth, might expose him to the disease. Presumably he acquired his anxiety from his famously hypochondriacal lover, Sergei Diaghilev. Over at No. 10 Downing Street, the Prime Minister, 55-year old David Lloyd George, contracted the disease in October. In December, the disease led to the death of 51-year old Lord Edward Cecil, a career Army officer, a Ministry of War official, and fourth son of former British Prime Minister Lord Salisbury. Two months later, it killed the 39-year old Sir Mark Sykes, the British half of the partnership responsible for the Sykes-Picot Agreement.

In Norway, the 49-year old painter, Edvard Munch, already noted for his painting *The Scream*, contracted the flu and considered himself lucky to have survived it, given his generally poor health. He painted self-portraits during his recovery.

The disease entered Russia from the west, though her returning POWs, and from the north and east, where Allied troops had landed in Archangel and Vladivostok. The Russian Civil War spread the virus throughout the vast nation.

In the United States, two prominent film stars fell ill with the flu, the 28-year old Lillian Gish, who had appeared in *Birth of a Nation*, and the 26-year old Mary Pickford, soon to found United Artists along with Charles Chaplin and Douglas Fairbanks. Pickford had to cut short her Liberty Bond tour because of her illness. In Chicago, Illinois, a sixteen-year old high school student named Walt Disney, who couldn't get into the Army but had heard that the American Red Cross was accepting 17-year olds to be ambulance drivers, signed up using a doctored birth certificate, but then he fell ill with the flu. By the time recovered and shipped off to Europe, the war was over.

In Denver, a 28-year old writer for the *Rocky Mountain News* fell ill and required months of hospitalization. She was so sick her dark hair fell out and she was left completely bald. When she recovered, her hair grew back, but now it was white. Her name was Katherine Anne Porter, and twenty years later, she would write a short novel about the influenza epidemic, informed by her own almost-fatal encounter with it. It would be called "Pale Horse, Pale Rider," and I quoted from it at the top of the episode.

No city in the United States had more casualties than Philadelphia, where the month of October 1918 saw nearly 50,000 influenza cases and over 12,000 deaths. Most of the city's doctors and nurses had been called away by the war. Hospitals filled to overflowing. So many telephone operators were out sick that the Bell Telephone Company took out newspaper advertisements, asking people not to make phone calls except for emergencies.

On city sidewalks, passers-by wearing gauze masks were a common sight. Movie houses, theatres, churches, saloons, and other public venues were closed for the emergency. Catholic

priests held open-air Masses on the front steps of their churches. Those who coughed or sneezed in public quickly found themselves shunned. The city coroner couldn't write up death certificates fast enough, and worse still, undertakers and cemeteries couldn't keep up, leaving unburied corpses to accumulate until horse-drawn wagons driven by volunteers began to ply the city streets, calling for residents to bring out their dead as if this were the 14th century all over again. The collected corpses were taken to a potter's field where they were buried in mass graves dug by steam shovels on loan from the Highway Department.

Scenes like these repeated themselves across the world. And as is human nature, the pandemic was usually blamed on outsiders. In West Africa, they called it the Brazilian flu. In Brazil, they called it the German flu. In Poland, they called it "the Bolshevik disease." The Iranians blamed it on the British. In Japan, strangely enough, they called it "sumo flu," apparently because the disease initially spread across that country through sumo tournaments.

But in most places, it came to be known as the "Spanish flu," and it's still called that in our time, even though Spain had nothing to do with the disease, other than succumbing to it like everyone else.

By December, the second wave of the pandemic was receding, after crisscrossing the globe. Only a few small islands escaped the second wave, and also one very large island: Australia, which had operated a successful quarantine program that prevented the disease from entering the country. Unfortunately for the Australians, they lifted the quarantine requirement too soon, in early 1919, mid-summer in the Southern Hemisphere, not usually a time when you think much about the flu. But then 1919 would see the beginning of a third wave of the ongoing pandemic.

This third wave was less virulent than the second, but still worse than normal flu, and it would not fade away until well into 1920. Among the sick this time around was the President of the United States, the now 62-year old Woodrow Wilson, in Paris at the time to negotiate the Versailles Treaty. Among the third wave fatalities were both of the Dodge Brothers, 56-year old John and 52-year old Horace, whose Dodge Brothers Motor Company had in only five years grown to become the principal supplier of automobiles and trucks to the US military and made both of its founders very rich.

After 1920, the virus disappeared. Not because of modern medicine or quarantines or any other twentieth-century technological marvel. No, the influenza pandemic faded away because by now a third or more of the human race had had the disease and there were no longer enough fresh victims to sustain it.

[music: J.S. Bach, Toccata in D minor]

The pharmacopeia of 1918 was much more limited than what is available to us today. In 1918, there was no vaccine, no drug to protect against influenza or to speed the patient's recovery, and there was exactly one drug on the market that was effective even so far as moderating the

symptoms. Less than twenty years old at the time, it was still being hailed as a "wonder drug," and was known as such for most of the twentieth century.

Physicians have known since ancient times that certain plant extracts, notably from willow trees, myrtle, and meadowsweet, all common plants in the Old World, had the property of relieving pain and reducing fever. Hippocrates knew all about it. He recommended chewing willow bark or drinking willow bark tea for relief. In the first half of the 19th century, modern organic chemists were able to isolate the active chemical from these extracts, and it came to be called "salicylic acid," a name derived from *salix*, the Latin word for willow.

Extraction of salicylic acid from plants at a commercial scale proved to be uneconomical, but in 1859, a German organic chemist named Hermann Kolbe developed a way to synthesize salicylic acid. And by the way, Kolbe was also the first to use the word "synthesize" in this sense, that is, to manufacture in a laboratory a chemical that previously was only found in living things, which is what "organic chemical" used to mean before laboratory synthesis became a thing.

Physicians began using salicylic acid to treat fever, pain, and inflammation, but it was tricky stuff. It tasted terrible and its high acidity caused stomach irritation. The late 19th century, though, was also the period when hi-tech German companies like Badische Anilin- und Soda-Fabrik, or BASF, became world leaders in the research and production of synthetic dyes and chemicals, as you know from episode 79. The firm I want to talk about right now is Friedrich Bayer and Company, a much smaller firm that began as a dye manufacturer, but by the end of the 19th century, they were branching out into pharmaceuticals.

In 1895, Bayer introduced diacetylmorphine, a drug derived from morphine that Bayer touted as a non-addictive substitute and sold direct to consumers under the trade name "heroin." No, I am not making this up. Heroin turned out to be a bit more addictive than Bayer claimed, and it was banned worldwide in the 1920s. The company had more success in 1899 with acetylsalicylic acid, a drug derived from salicylic acid, which it touted as a safer substitute and sold under the trade name "aspirin."

The company trademark by this time was a white circle with the word "Bayer" printed twice in a cross shape, with the two words sharing the "Y" in the middle. Bayer sold aspirin tablets direct to consumers with the company logo pressed into each one, making every aspirin tablet into a tiny advertisement for the company. In 1903, the company created an American subsidiary, which Americans called "Bayer," which manufactured aspirin for the US market at a plant in Rensselaer, New York, which was at the time one of the largest manufacturing plants in the nation.

Aspirin truly was a wonder drug and one of the medical marvels of the early twentieth century. It was believed to be very safe and was soon in huge demand. We know today that there are risks associated with aspirin, but these risks were not known at the time, and doctors of this era routinely prescribed dosages of aspirin that would be considered unsafe today. One possible

example might be the Russian Crown Prince Alexei, who you'll recall suffered from painful episodes related to his hemophilia. In our time, some historians have suggested that Alexei's doctors were likely prescribing aspirin for his pain, blissfully unaware that aspirin also inhibits blood clotting, making it very dangerous to a hemophiliac patient like Alexei. Some have speculated that perhaps the reason why Alexei seemed to get better when Rasputin was supervising his care was because Rasputin opposed the use of aspirin. But this is just speculation. We don't know for certain the details of Alexei's medical treatments.

When the United States entered the Great War, Bayer's American subsidiary and all its assets, including its trademarks and the plant in New York were seized by the US government and auctioned off. The buyer, the American firm Sterling Drug, would continue to manufacture and sell aspirin under the Bayer name in the United States and in Canada, where it also held the rights. In 1920, the name "aspirin" was determined to have become generic under US law, and the company lost the trademark in the US, and since then, any brand of acetylsalicylic acid can be labeled "aspirin" in the United States, though the "aspirin" trademark still holds in Canada, in Mexico, and many other nations even in our time. And in 1994, the original Bayer Corporation in Germany would re-acquire the rights to the Bayer cross logo and the "aspirin" trademark.

When the influenza pandemic of 1918 struck, doctors in Western nations prescribed aspirin and they prescribed it liberally, as it was virtually the only drug available that could be used to treat influenza symptoms safely and effectively. In the United States, the influenza pandemic sparked a widely spread rumor that the formerly German-owned plant in New York was secretly adding poisons into its aspirin tablets to spread illness and undermine the American war effort in yet another depressing example of our human tendency to blame diseases on foreigners. The US government took these rumors seriously enough to investigate the company, but found nothing amiss, of course. Influenza is caused by a virus, not by a poison.

High doses of aspirin represent another disturbing aspect of the 1918 pandemic. We have a much better understanding of the risks of aspirin today than doctors did then. The doses they prescribed back then were so high that in 2009, an American physician named Karen Starko published a paper speculating that aspirin overdose may have contributed to the pandemic's unusually high death rate. This would be a disturbing thought, if it's true, but her suggestion so far remains speculation. The strongest argument against it is that the mortality rate during the pandemic was just as high or higher in countries like China and India, where nobody got aspirin, as it was in the Western world, were many people did.

Another possibility is that the disease triggered an overreaction in the human immune system, called a cytokine storm. That would explain why the strongest and healthiest were the most frequent victims.

What was the overall death total of the 1918 pandemic? Its multiple waves struck almost every human community on Earth, touching everyone from the native peoples of the Arctic to those of

the Pacific Islands and central Africa, isolated human communities that had never before experienced the disease. Yet in 1918, most countries in the world kept no death records of any kind, so we can only extrapolate from the places where we do have that data. In the United States, over 600,000 Americans died from the flu. That's about .6% of the population. The numbers in Great Britain were comparable. But these were at the time the places with the best healthcare in the world. How many deaths were there in India, one wonders.

The American public health researcher Edwin Jordan published one of the earliest detailed studies of the pandemic in 1925. He estimated that the worldwide death toll was 21.6 million, a much higher figure than the estimated 16 million killed in the Great War. Jordan's estimate would stand unchallenged for most of the century, but beginning in the 1990s, new studies have been steadily raising the estimates. A 1991 study suggested 30 million killed in the second wave alone, and in 1998, Australian historian Niall Johnson and German historian Jürgen Müller concluded that deaths in rural and minority populations around the world were seriously underestimated. They figure 50 million worldwide, including 18 million in India and over 10 million in China. Even at that, Johnson and Müller suggest their estimate may be conservative, and that the true number might be as high as 100 million.

These figures are staggering. They suggest the pandemic killed more people than either world war, and possibly more than both world wars put together. A little back-of-the-envelope calculation supports these higher estimates. If about one-third of the population contracted the flu and 10% to 20% of them died from it, numbers supported by the data we do have, and if you extrapolate that to a world population of 1.5 billion, that would work out to about 500 million made sick and 50 to 100 million killed, numbers in line with Johnson's and Müller's figures. It was certainly the deadliest epidemic in human history, in terms of absolute numbers.

And yet in many ways, it is, surprisingly, a forgotten epidemic. So it was dubbed by the American historian Alfred Crosby in his 1989 study. In the United States alone, the pandemic killed more Americans than all of America's twentieth century wars combined, and yet, Crosby noted, when he checked the *Reader's Guide to Periodical Literature* for the years 1919-1921, he found 47 column inches of references to Prohibition, 20 inches on Bolshevism, 13 inches on baseball, and only eight column inches of references to the influenza epidemic. When he looked at the *Encyclopaedia Britannica*, he found three sentences on the pandemic. The *Encyclopedia Americana* had one sentence, noting that the flu killed 21 million people. This number is now considered far too low, but, even if we take the figure at face value, Crosby points out, "Twenty-one million people? One sentence? Hello?"

You would be hard pressed to find more than a cursory reference to the pandemic—if that much—in most history textbooks or medical textbooks or even in biographies of prominent persons who lived through it. I checked the standard military histories of the Great War that I use in this podcast, and none of them even had an index entry for influenza. That seems strange, especially considering Erich Ludendorff's contention that the pandemic cost him the war. Well,

that's Ludendorff, but still, there is evidence that the flu hit Germany and Austria harder than it hit Allied nations—malnutrition may be part of the reason—and while it is far from clear that the pandemic decided the outcome of the war, that's not a suggestion that can be casually dismissed, either.

Why are we so keen to forget? One reason may be that the horrors of the few months of the pandemic blur in the memory, bleeding into the years-long horror of the Great War. It may be that war deaths are starker because they are more obvious. The victims wear uniforms and they are accounted for. And there is less drama in an epidemic than there is in a war. An epidemic does not begin with a public declaration and a banner newspaper headline, nor does it end with church bells and a parade. It does not raise up great leaders. Its outcome does not hinge on a decisive battle or a flash of strategic insight. An epidemic comes when it comes and it goes when it goes, for reasons outside human control.

Or is it simply that it takes longer to absorb the horror of a pandemic than that of a war? Perhaps it is only possible now, with a hundred years of perspective, to take in fully the greatest natural calamity of the twentieth century.

We'll have to stop there for today. Thank you for listening, and thank you to Matthew for his donation, and thank you to Tom for becoming a patron of the podcast. Donors and patrons help keep the lights on around here. Also, I'll mention that I'm about to buy a new and more powerful PC that should make producing this podcast a little quicker and easier, and I'm hoping perhaps improve the sound quality a little, too. Maybe you'll notice a difference when I get it installed and up and running. Donors and patrons help cover the costs of expenses like that, which keeps both me and Mrs. History of the Twentieth Century happy. If you'd like to help chip in on this project, please visit the website, historyofthetwentiethcentury.com and click on the PayPal button, where you can make a one-time donation, or the Patreon button, which will lead you on your way to becoming a patron of the podcast. And just in case you didn't already know, you can use PayPal to make a credit card donation even if you don't have a PayPal account. I also take checks; the address to send them to is listed under "Help the Podcast."

I couldn't possibly produce *The History of the Twentieth Century* podcast without relying on many excellent books and articles that enlighten me on the topics we discuss. I post some of these on the website, although, yes, I am way behind on that. I'd better get cracking to update that soon. But occasionally a single work becomes so helpful in my research I feel I ought to mention it in the podcast itself. Such is the case this week and last week with Laura Spinney's book on the 1918 pandemic, which is also titled *Pale Rider*. What a coincidence. If listening to last week's episode and this one has moved you to read more on the topic, this is the first book I'd direct you to.

Next week is a bye week for the podcast, but I hope you'll join me in two weeks' time, on *The History of the Twentieth Century*, as we look in on the political situations in the United

Kingdom, where they held a general election shortly after the armistice, and in the United States, where they held a mid-term election just before the armistice. The Coupon Election, in two weeks' time, on *The History of the Twentieth Century*.

Oh, and one more thing. I mentioned that the 1918 strain of influenza was commonly referred to then and now as the "Spanish flu," despite the very reasonable objections of Spanish people, then and now, that their nation has no special connection to this disease. It is unfair, and you'll notice I struggled mightily not to use that name in talking about the pandemic in this podcast.

But this is not a burden unique to the people of Spain. If you don't believe me, ask the good citizens of Lyme, Connecticut, for instance. Or ask the American Legion about Legionnaire's Disease. Or ask the families of such great medical researchers as Burrill Crohn or Hans Gerhard Creutzfeldt or Alois Alzheimer.

The name we give a disease is not just an issue of public relations. A poor choice of name can lead to poor policy choices. Outbreaks of swine flu have been known to spur governments to ban pork imports or order the wholesale slaughter of hogs, even though humans don't get swine flu from hogs—and they certainly don't get it from eating cooked pork. Humans get swine flu from other humans. The poor pigs get it from us.

And of course, the most obvious example of disease-naming stigma is the human immunodeficiency virus, or HIV. When it first emerged, the disease it causes was given names like GRID, an acronym for "gay-related immune deficiency" and "4H Disease," the "Hs" standing for hemophiliacs, homosexuals, heroin users, and Haitians, thus unfairly singling out certain classes of people who had nothing to do with the disease other than they got it first.

That's why in 2015, the World Health Organization issued guidelines for the naming of future diseases. These guidelines recommend that disease names should not reference places, foods, animals, individuals, or classes of people. Instead, the WHO recommends practical labels like "respiratory disease" with more specific descriptors and numbers, as needed, to distinguish among similar conditions. One example would be SARS, an acronym which stands for "severe acute respiratory syndrome."

[music: Closing Theme]

© 2019 by Mark Painter. All rights reserved.