Dynamiting San Francisco in 1906

In This Issue:
Sergeant Dillon With the Dynamite Squads: 1906
In Memoriam: W. Michael Mathes
Mining in California’s Mono Basin Region
THREE "EXPLOSIVE" MYTHS

The great earthquake and subsequent fires of April, 1906 brought San Francisco to center stage nationally and internationally. They remain California's greatest natural disasters, and their consequences still reverberate down to the present day. Many, if not most, California historians consider the efforts to combat the fires and the city's subsequent recovery, to have been San Francisco's finest hour. Yet, one of the most controversial responses to the catastrophe was the use of explosives to fight many different fires in many different parts of San Francisco over the three

Figure 1: The San Francisco Presidio and "Fortress Marin" across the Golden Gate as Mabel Burke and William T. Dillon knew them. The Presidio was the headquarters of the U.S. Army's Western Division, commanding all military detachments of the Pacific Coast states and overseas possessions, including Hawaii and the Philippines. The Marin forts, especially Fort Baker, to the immediate north, were the Presidio's closest and most important satellites. Map by Rusty van Rossmann and Brian Dervin Dillon, elaborated from the U.S. Geological Survey Map of November 1914.
days that the city was burning.

Misinformation about the use and misuse of explosives and even of artillery began to circulate even before the fires were actually out. Some were vengeful "payback" attacks by individuals who believed that they had been treated unfairly; others were written down as uncorroborated second-hand information in contemporary quasi-eyewitness accounts, and at least one was a complete fabrication by a popular fiction writer known to most of her readers by a false name. With the passage of time, some of these myths have come to be accepted as factual, and have been resuscitated by gullible or incautious historians and novelists. Three persistent myths about fighting the great San Francisco fires with explosives between April 18 and 21, 1906 are:

1: All fire-fighting demolition was the work of a single U.S. Army "dynamite brigade."
2: The Army acted irresponsibly without consulting civil authorities or civilian experts.
3: The Army used cannon to blow down buildings as part of the fire-fighting effort.

The historical record for the great 1906 San Francisco Earthquake and Fires is incomplete and contradictory, yet five sources of evidence can be used to refute all three myths. These are the official reports written shortly after the earthquake and fires by various civil and military representatives, contemporary newspaper, magazine, and popular "eyewitness" book accounts, private letters by contemporary eyewitnesses, contemporary photographs and retrospective reminiscences by participants long after the event. Our objective review of the evidence will, hopefully, help move recent trends in thinking and writing about the 1906 cataclysm from fiction back towards fact.

APRIL 18, 1906: THE VIEW FROM SAUSALITO

The great earthquake struck at 5:12 A.M. on the morning of April 18, 1906, waking up every living soul in the Bay Area. Shortly afterwards, twenty-three year-old Alice Mabel Burke (1883-1962), who lived in Sausalito with her mother and father, drove her buckboard up to the top of Hogback Ridge above her home town. Mabel, the granddaughter of an 1850 California gold miner, had gone to grammar school in Sausalito and then on to high school in San Francisco. In 1906 she worked south of Market Street, taking the ferry twice daily across the Golden Gate. Her job was as a "typewriter" (the term then used for a clerk-typist) at the Goodyear Rubber Company.

Atop the Sausalito Hogback, Mabel joined hundreds of spectators from southern Marin County, watching as darkness turned to dawn. Binoculars, telescopes, and the naked eye all looked across the Golden Gate towards San Francisco (Figure 1). Many small fires had begun burning during the first few minutes after the quake, as charcoal-fed household heaters overturned, small gas lines ruptured, and downed power lines sparked into flammable materials. As the sun rose dozens of individual smoke plumes above the city became visible. Slowly but inexorably, the solitary plumes began to join together. Now, numerous small fires were turning into fewer, but larger, conflagrations. Nobody watching from the Hogback knew that most of the city's water mains had broken, leaving little or no water with which to fight the fires.

Mabel Burke drove her buckboard back down the hill to her house in Sausalito's Old Town, in a great hurry. She had locked 50 cents in her desk drawer at work the day before, and didn't want to lose such a valuable sum (a good chunk of a day's salary in 1906) if she could beat the fire to it. Mabel took the first ferry from Sausalito over to San Francisco, earning the dubious distinction of being one of the handful of brave persons "bucking the tide" and trying to get into the city while panicked hundreds, then thousands, were trying to get out.

STAMPEDE ON MISSION STREET

Mabel pushed through the crowds, moving towards her place of business in what then was called "South of the Slot" and today would simply be called "South of Market" but she could not get to her office. This was not because of flames or rubble, but because only five or six blocks from the ferry slip Mission Street was completely blocked with dead cattle (Figure 2). The steers were, in some places, stacked two or three high, interlaced with each other, and the streets and sidewalks were slippery with their blood.

This gruesome scene was of very recent vintage when Mabel Burke saw it early on the morning of April 18th. More than fifty steers, normally penned
in the stockyards adjacent to the slaughterhouses south of Mission Street, had gotten loose during the earthquake, and stampeded up and onto Mission Street near its intersection with First. Some of the animals had been killed or stunned by falling walls, some had fallen through giant cracks in the pavement into the basements of buildings, while others were enraged and charging at any people who ventured near. A local saloon keeper, John Moller, confronting a maddened steer, was gored to death right in front of a San Francisco policeman, Harry F. Walsh. Walsh then began killing the most aggressive of the cattle with his revolver, and dispatching those with broken legs or internal injuries. A Texas cowboy with a single-shot rifle then joined officer Walsh in shooting down the frenzied animals, one at a time, until Mission Street near its intersection with Fremont was completely choked with dead livestock and its gutters were literally running with gore. The bovine bloodbath was all over by 7 A.M., just as Mabel Burke's Sausalito ferry touched the dock at the Embarcadero.17

As the morning advanced and the wind gained strength, the fires began to consume the city's northeastern portion. Mabel Burke turned around, joining the thousands of refugees streaming out of San Francisco, and headed back to Sausalito. She got home before noon, then spent the better part of the full three days of the fire, April 18 through 20, atop the Hog's Back, camping out with blankets and picnic lunches alongside her friends and neighbors. Most of Sausalito was up there on the ridgeline, spellbound as they watched the greatest city on the Pacific Coast of all of the Americas in flames.

Beginning on the morning of that first day, explosions could be heard booming across the bay. These grew in number and intensity on the first afternoon and through the second day, until by the third day of the great fire they had become incessant and continuous.18 The noise was from demolition squads blowing up buildings one step ahead of the flames, hoping to create firebreaks that might slow down the conflagration. After the third day, once the fire was out, the dangerous shells of burnt-out buildings would continue to be blasted down as the most expedient means of demolition. The work of the dynamite squads continued for weeks to come, and the booming across the bay would sound all through May. Unbeknownst to Mabel Burke, one of the men in charge of one of the dynamite squads whose San Francisco handiwork was audible all the way across the water in Sausalito was Coast Artillery Sergeant William T. Dillon. Four years later, in 1910, he would become her husband.

"KING BILL" OF THE 61st COAST ARTILLERY

William Tarleton Dillon (1869-1938) was quintessentially Californian. He may be unique in American military history as the only man who served from 1898 until 1928 on four continents (Asia, Africa, the Americas, and Europe) in three separate military organizations under at least three different names.19 He was a "mustang," a private soldier who rose through the enlisted ranks to senior non-com and ultimately became a directly commissioned officer.20 While doing so he created a new identity and an entirely new life within the military culture of San Francisco.

By 1901 Dillon had been a foot soldier in the
all-Irish Company A of the 1st California Volunteer Infantry in the Philippines, a mounted guerilla fighting against the British with the Orange Free State Boers in South Africa, and a regular Army Field Artillery private back in the Philippines and in China during the Boxer Expedition. Made a Sergeant in 1901, he returned to California detailed to the 61st Coast Artillery Company. The 61st was formed at the San Francisco Presidio, then made operational at its permanent post at Fort Baker, Marin County. San Francisco was the largest and most important city on the Pacific Coast and the biggest American city west of the Mississippi. San Francisco was our country's gateway to both Asia and Pacific Latin America. In 1902, at the turn of the new century, Fort Baker became its northern guardian across the Golden Gate.

Blessed with the gift of gab, Sergeant Dillon spoke four languages: English, French, German and Spanish. He could and did sing in at least three of them. He was a six-footer when the average height of the American soldier was five feet, eight inches. Dillon was a consummate horseman who also tinkered with early automobile engines. He forged tools in army blacksmith shops, yet was a master of that brand-new "necessity" electricity. He shot photos with his own camera, developed his own film and printed his own postcards at night in his tent while on maneuvers. He was a crack shot with rifle, pistol, shotgun and cannon (the latter from 3.2 up to twelve inches in bore size) and had the marksmanship medals to prove it.

By 1910 Dillon had earned the coveted rank of First Sergeant. He was the top enlisted man in the most outstanding coast artillery company in the United States Army, and instrumental in making it so. The gun captain at Battery Spencer, Dillon was the leader of the champion big gun artillery team in the country for three years running, from 1910-12 (Figure 3). Active in veteran's and lay religious organizations, First Sergeant Dillon was a member of the Irish Catholic non-commissioned "mafia," the unheralded backbone of the predominantly WASP U.S. Army command structure.

Dillon could out-ride, out-shoot, and out-talk most men. He could recite poetry, jokes and

Figure 3: The 61st Coast Artillery lets fly with one of its 12-inch Model 1895 rifled cannon at Battery Spencer on the Marin headlands in 1912. The 61st Coast Artillery was the premier big-gun unit within the U.S. Army and First Sergeant Dillon and his boys routinely scored hits on moving targets six miles away offshore. It was the first to achieve a perfect (100%) marksmanship score with large caliber artillery in 1902, the year of its formation. Dillon was the leader of the national championship big gun battery for three years running, 1910-1912. During the 1906 San Francisco earthquake and fire, Sergeant Dillon led a demolition squad blowing up buildings ahead of the flames. W.T. Dillon Kodak postcard photo, Dillon-Collection.
limericks, compose rhyming doggerel, and send the same out over the wires, out-telegraphing most telegraphers. He carried his own telegraph key with him much as modern "techies" carry their personal laptop computers. In an army populated mainly by semi-literate high-school dropouts, Dillon was that rarity, a University (of Notre Dame) dropout. He could compute long-distance ballistic arcs in his head, and hit moving targets over six miles away with giant cannons. Comparatively late in his military career, in World War I, he became a highly-decorated officer, eventually reaching the rank of Lieutenant Colonel. He shot down German airplanes in France in 1918 before returning to more challenging duck shooting back home in early 1920s California. William T. Dillon cast a very long shadow: his soldiers called him "King Bill."

**SAN FRANCISCO'S SIX-WAY BUREAUCRATIC BOONDOGGLE**

San Francisco Mayor Eugene E. Schmitz was quite possibly the most corrupt politician in California history. An embarrassment of national scale, the mere mention of his name made President Theodore Roosevelt wince. Schmitz was a musician, a theater violinist, whose sole political experience, before being put forward as a mayoral candidate by newspaper magnate William Randolph Hearst, had been as a union organizer and president of the San Francisco Musician's Union. Despite his Germanic last name, Mayor Schmitz was half-Irish. The handsome, happy, bumbling, thoroughly dishonest Schmitz was merely the puppet of the shadowy U.C. Berkeley and Hastings Law School graduate and extortionate genius Abe Ruef. Under secret investigation at the time of the 1906 disaster, Mayor Schmitz, surprising just about everybody, quite possibly even himself, rose to the occasion and functioned in reasonably creditable fashion.

Mayor Schmitz, early on the first day of the fires, specifically requested the assistance of the U.S. Army, and directed his city's Police and Fire departments to work closely with the military. This was with the understanding that the army be "strictly subordinate to the civil authorities."

Adolphus Greely, the Major General commanding

![Figure 4: Brigadier General Frederick Funston (at left in back seat) in a 1906 Royal Tourist automobile at the San Francisco Presidio. Funston was a hero of the Spanish American War in Cuba and of the Philippine Insurrection. His decisive action saved San Francisco from complete destruction during the three days of the fires following the great earthquake. General Funston's able direction of the relief effort in the months following endeared him to most San Franciscans. Funston was the first to use automobiles in U.S. military operations, during the 1906 San Francisco fires. J.D. Givens photo.](image-url)
the Western Division of the U.S. Army, had the misfortune of being on a train heading eastwards through the Midwest when the great San Francisco earthquake struck the morning of April 18, 1906. His second-in-command at the San Francisco Presidio, Brigadier General Frederick Funston (Figure 4), consequently assumed leadership of all military operations during the three days of fire following the earthquake.

"Fighting Fred" Funston was the right man, in the right place, at the right time. He was one of the shortest (five feet, four inches), yet one of the most celebrated, officers in the U.S. Army. A West Point reject, Funston went to Cuba and fought against the Spaniards as a guerilla long before the U.S. declared war. Later, he moved on to the Philippines as the Colonel of the 20th Kansas Volunteer Infantry. More than any other American officer, Funston deserves the credit for setting the groundwork for peace of a sort after too many years of vicious guerilla and anti-guerilla fighting on Luzon by bringing in Emilio Aguinaldo, the primary Filipino insurrecto. Medal of Honor winner Funston could not have been more different from his civilian counterpart Eugene Schmitz. Funston cordially detested Schmitz as a moral weakling, yet strictly observed proper protocol in all of his April, 1906, dealings with him.

By noon on April 18, 1906, much of San Francisco was in a panic, and by the end of that first day,

Figure 5: Small fires become big ones: Market Street ablaze on the morning of April 18, 1906. View is towards the northeast in the direction of the Embarcadero. The 18-story San Francisco Call Building, on the south side of Market at center, is alight; neighboring buildings in the foreground are total losses while those beyond remain untouched. Regular army soldiers, both artillery and cavalry, stand guard while a San Francisco Fire Department steam pump engine makes the best of falling hydrant pressure from broken water mains. From the Charles Delehth Papers, 1868-1908, courtesy of the Bancroft Library, University of California, Berkeley.
General Funston estimated that more than 100,000 people had been left homeless. As the day wore on and the fires grew larger, many residents streamed towards the ferry slips, hoping to escape across the water to Oakland, Berkeley, Sausalito and San Rafael. San Franciscans who owned buggies or wagons piled up as many valuables as could be fit into trunks or suitcases and headed south towards the Peninsula or west towards Ocean Beach. Funston telegraphed his superiors to send him all available army tents as the initial step in what would become the largest relief effort in U.S. history. A day or two later, he had revised his refugee count upwards to 250,000.

Meanwhile, drunks, toughs and criminals had a field day, preying upon the innocent and looting abandoned houses and businesses, especially saloons, with virtual impunity. Contemporary writer Charles Morris, who can always be relied upon for the purplet of descriptive prose, effused:

"...the vandals were quickly at work. Routed out from their dens along the wharves, the rats of the waterfront, the drifters on the back eddy of civilization, crawled out intent on plunder."

Mayor Schmitz' most controversial act was his infamous "Shoot to Kill" order as a means of halting this looting. All police and military under his authority were empowered to enforce the Mayor's edict. Despite the hysterical headlines of some contemporary newspapers, and the much more recent beatings of anti-military historical revisionists to the contrary, martial law was never declared in San Francisco at any time during the 1906 disaster. Funston's troops, instead, were ordered to work closely with both the San Francisco Fire and Police Departments. On the fire line, squads of soldiers were led by junior officers or senior non-coms under the direction of individual firemen or policemen who were, in turn, under the authority and the direction of the Mayor's office.

Tragically, just when he was needed most, the charismatic and brilliant San Francisco Fire Chief Dennis Sullivan was not available, having been mortally injured during the initial moments of the disaster. Consequently, during the entire course of the conflagrations, the Fire Department not only was headless, but had two de facto heads, and sometimes even four. Acting Chief John Dougherty and the much younger Acting Chief Patrick Shaughnessy had both reported for duty. Dougherty had seniority over Shaughnessy, but was old, tired and had already announced his impending retirement. The much more energetic Shaughnessy was therefore the obvious choice to replace the dying Chief Sullivan. Unfortunately, Mayor Schmitz, in a dither of indecision, put Dougherty in charge, and Shaughnessy's appointment as Sullivan's replacement had to wait for two months after the fire was out. Firemen unclear as to who they should report to, consequently, sometimes worked at cross purposes during the three days of the fires. Worse, Mayor Schmitz and even Boss Ruef sometimes usurped Dougherty's mantel of leadership themselves, so that at times non-firemen and firemen alike could take their pick of three or four different "chiefs" to report to, or to ignore.

Compounding this confusion, no fewer than six different military and police elements responded to the emergency with varying levels of effectiveness. First and foremost was the tiny San Francisco Police Department, numbering at most only 700 men. Then came the regular U.S. Army, represented by all three branches (Infantry, Cavalry, and Artillery), directly at the request of Mayor Schmitz, and under Funston's command. Small detachments of U.S. Marines and U.S. Navy Sailors from Mare Island also landed on the first day of the fire, and did very effective work fighting the fires along the Embarcadero while simultaneously trying to control the vast numbers of inebriates that refused to leave the waterfront. These Sailors and Marines were seconded to Funston and used just as if they were soldiers.

Meanwhile, hundreds of California National Guard volunteers showed up at their armories, changed into their uniforms, and checked out rifles, bayonets, and ammunition. In some cases guardsmen congregated at their armories, which were scattered across the city, awaiting their officers, but in others they simply wandered off towards the fires, without leaders and without orders. From beginning to end, the National Guard had no clearly-defined role to play in response to the disaster.

The commander of the National Guard was not even in San Francisco at the time of the earthquake, but incommunicado up in Ukiah. Unified command and control continued to unravel when Governor Pardee, not wanting to be perceived as indifferent
to the disaster befalling his state's largest city, hot-footed it from Sacramento to Oakland. From Oakland Pardee mobilized the entire National Guard, ordering guardsmen from many different California towns to head for San Francisco. This was against the express wishes of both Mayor Schmitz and General Funston, who considered the Guard an unnecessary distraction in a rapidly worsening situation.

The National Guard, eventually brought under the command of Brigadier General John A. Koster once he returned from Ukiah, would later be damned with faint praise by General Greely, who termed it "well-meaning" and "zealous." Greely also noted that the "youthfulness and inexperience" of the California National Guard "caused them to occasionally ignore municipal authority," the clear implication that this was something the disciplined troops under his own command would never do.\textsuperscript{30}

The California National Guard was a brand-new organization, only three years old at the time of the 1906 earthquake and fires. The "Guard" was so new, in fact, that not everybody knew what to call it: many "regulars" (as full-time U.S. Army soldiers were then called) referred to the Guard as the "state militia," as did many San Francisco firemen, policemen, and newspaper reporters. The National Guard in 1903 replaced the old system of state volunteer regiments that had been so important during the American Civil War. Frederick Funston and Teddy Roosevelt had both joined volunteer

Figure 6: Looking up the south side of Market Street to the southwest, with, from left to right, the corner of the Palace Hotel, the still-under-construction Monadnock Building, the Hearst/Examiner Building, and the towering Spreckles or Call Building, smoking like a chimney on the morning of April 18th, 1906. Compare with Figure 5, a view from the opposite direction. The San Francisco Fire Department pump engine in left foreground, with a full head of steam, is still harnessed to its horse team. Regular U.S. Army artillery and cavalrmen are on guard at right. Once the water failed on the first morning of the fires, out came the dynamite. Photo courtesy of the Bancroft Library, University of California, Berkeley.
regiments as senior officers in 1898 and private William T. Dillon had also joined the 1st California Volunteer Infantry some eight years before the earthquake. The Spanish American War was the final service performed by the volunteer regiments.

Consequently, the San Francisco disaster response was the very first mobilization of the neophyte California National Guard. The Guard took its orders only from the Governor, not from the police or the regular Army, although some unit commanders wisely placed themselves under the authority of more experienced regular Army officers. The California National Guard's political commander, Governor Pardee, politely refused to cooperate or even to consult with General Funston, and ignored Mayor Schmitz for all three days of the fire-fighting effort. This was a recipe not just for confusion, but also, and inevitably, for confrontations between different bodies of armed men working under separate and antagonistic chains of command.

The sixth and final "law enforcement" body at work during the fires and immediately afterwards was euphemistically termed the "Citizens Guard." This was essentially an armed civilian vigilante force deputized by Mayor Schmitz. They had no military or police training, and most members devoted all of their "service time" to simply protecting their own property or that of their employers. While few if any of these "deputies" would be accused of looting or pillaging themselves, they would neither respond to nor obey commands from any other duly constituted authority. Some suspected looters were killed by members of this "citizens guard." Such shootings in almost every case were blamed on regular Army soldiers.

The six-way jurisdictional nightmare could only have deadly consequences. San Francisco was already faced with two natural catastrophes, the earthquake and the fire. The contradictory and competitive emergency law enforcement situation created by Governor Pardee and Mayor Schmitz now compounded the two natural disasters by creating a third and entirely man-made one, a criminally irresponsible bureaucratic boondoggle. By the end of the first day three persons either caught looting or suspected of doing so had been shot dead by "soldiers." At least one of these killings was a summary execution. Later that first night, several reprehensible incidents occurred when private citizens, all on errands of mercy, could not answer a call for identification rapidly enough, and were shot dead by "soldiers." Subsequent investigations determined that not a single one of these shootings was by regular Army soldiers: all were the work of either the minimally-trained National Guard or the completely untrained "Citizens Guard." One contemporary hearsay account also relates how looters caught in the act were, in at least one instance, lynched on the spot by groups of irate citizens unaffiliated with any of the six official or ad hoc law enforcement bodies.

There were even armed confrontations between regular Army troops and National Guardsmen, and between regulars and the Citizen Guard. These were "Mexican standoffs" where well-trained, armed and uniformed professional soldiers, sailors, marines, firemen or policemen confronted "weekend warriors" or worse. One California National Guardsman even tried to murder the San Francisco Chief of Police Jeremiah F. Dinan. The homicidal guardsman was stopped in the nick of time, eventually sent to trial, and found to be insane, which did little to inspire confidence in the National Guard's recruitment policies. Some buildings ordered "blown" by the San Francisco Fire Department were not, because their owners, wearing the "tin stars" of the Citizens Guard issued by Mayor Schmitz, turned away dynamite squads at gunpoint, thereby encouraging the growth and longevity of the fires.

THE REGULARS MARCH IN

The first regular Army units to report for anti-looting duty, only two hours after the earthquake, were Companies C and D of the Engineers under the command of Captains Meriwether L. Walker, the Fort Mason commander, and his subordinate Captain Kelly. They were sent by the Chief of Police to the business district, what today would be termed the financial district, only a few blocks south of their post at Fort Mason. A quarter-hour later, elements of the Presidio garrison arrived at the Hall of Justice. These were the 10th, 29th, 38th, 66th, 67th, 70th, and 105th Coast Artillery Companies serving as infantry, Troops I and K of the 14th Cavalry, and elements of the 1st, 9th, and 24th Field Artillery, also serving as infantry.

Each Coast Artillery Company numbered (at least on paper) between 80 to 100 soldiers, including officers (normally only two, a senior Captain or First Lieutenant and a junior second Lieutenant), non-commissioned officers (usually eight to ten
Sergeants and ten to twelve Corporals), the remainder being 50 to 80 enlisted private soldiers. Coast Artillery companies, compared to regular Army infantry companies, were very heavy on non-coms, mainly because the technical requirements of servicing the big guns (ordnance, telegraphy, fire control, etc.) were much greater than the simpler demands placed on the foot soldiers. All Coast Artillery units, however, were cross-trained as infantry, and most served in this capacity during the 1906 San Francisco emergency. Cavalry Troops were the functional equivalent of infantry and artillery companies.

In command of the roughly 1,000 regular Army soldiers available for duty from the San Francisco Presidio was Colonel Charles Morris of the Artillery Corps. The troops were ordered to conduct crowd control around the margins of the fire, and sent to both the post office and the Federal Mint to prevent looting. The 25th and 64th Coast Artillery Companies were ordered from Fort Miley later on the first morning of the fire to reinforce the troops guarding the Mint and also to guard the county jail. Elements of the 22nd Infantry also arrived from Fort McDowell and were set to work guarding the business district, specifically the appraiser's office, and assisting the San Francisco Fire Department in muscling the few fire hoses that were not running dry.

By the end of the first day, the western portion of the city, that closest to the Presidio, was firmly under the control of regular Army troops with Colonel Morris in command. The bulk of the regular Army soldiers remained on the fire line, doing the work of both police and firemen. By the second day the fire was advancing slowly, according to General Funston's estimate, consuming a city block every two hours. The first soldiers to arrive had now been working for 24 hours without letup. Reinforcements, consequently, were requested from other bases beyond San Francisco.

Early on the morning of April 19th, the second day of the fires, the 32nd, 61st, and 68th Coast Artillery Companies from Fort Baker, under the command of Colonel R. H. Patterson, were brought across the Golden Gate to the San Francisco Presidio for fire duty. They brought the total number of regular Army troops on fire duty to perhaps 1,300 men. One entire company, the 148th, was left in reserve back at Baker to "hold the fort." Sergeant Dillon of the 61st Coast Artillery Company was at the head of a squad of men numbering one or two corporals and fifteen to twenty privates as he moved eastward to the fire lines. Also on the second day, a torpedo boat was sent to the Presidio of Monterey for more troops. Detachments of the 20th Infantry and the 14th Cavalry subsequently arrived from this southern post for duty in the stricken city. Around the same time, four more companies of the 22nd Infantry, normally stationed on Alcatraz and Angel Islands, arrived in San Francisco as reinforcements. By the end of the second day the regular Army ranks had swelled to around 1,700 men.

On the 21st, once most of the fires were out, Governor Pardee finally came over from Oakland for a pow-wow with Mayor Schmitz and General Funston. San Francisco was then divided into three districts, one controlled by the regular Army, also including the Marines and Sailors, one by the National Guard, and the third and final one by the municipal police. Because of an ever-increasing number of incidents, on April 23, Mayor Schmitz and the San Francisco Citizens' Committee formally requested that the National Guard be removed from the city. Governor Pardee refused, and the Guard stayed.

In the many years that have passed since 1906, the initially very low death estimates have been constantly revised upwards. The death toll from all causes, earthquake, fire, and shooting, was first held to be only around 350 souls. Now, a century later, painstaking research by Gladys Hansen and others has revealed it to be perhaps ten times that. More than just a few people, probably dozens, were indeed shot out of hand by various armed men, sometimes on the flimsiest of pretexts. There is no doubt that innocent people were killed by over-eager or trigger-happy persons, and that, some of these shooters were, indeed, in uniform.

Nevertheless, the blame for most or even many such incidents cannot be laid at the feet of the regular Army. After all, newspaper reporters no less than local civilians usually could not distinguish between Guardsmen and regular Army troops. Both were simply called "soldiers," both wore the same uniforms, and carried the same weapons. Similarly, lurid stories and fanciful renderings of U.S. Army firing squads mowing down lines of multiple victims in the smoking rubble are not to be taken seriously.

Not all regular Army units behaved themselves during the three days of the San Francisco fires, or during the weeks afterwards as the relief effort got under way. Many complaints were made against
one company of the 22nd Infantry, some of whose soldiers began looting Southern Pacific freight cars standing idle in the rail yards. Some of the freight cars contained liquor, and once the foot soldiers began passing out the booze discipline began to break down. The infantrymen were not the only ones pilfering alcohol from the trains; Southern Pacific employees and Mayor Schmitz' own special policemen were doing the same, handing out liquor to any enlisted men that chance had brought to the vicinity. Perhaps the 22nd Infantry troops, normally left to their own devices on Alcatraz and Angel Islands at some remove from polite society, were not "fully adjusted" to dealing with civilians under such unusual circumstances.

Regretfully, another unit whose reputation suffered was Sergeant Dillon's own 61st Coast Artillery Company, which by this time had been split up into separate squads, each one under a different senior non-com. An after-action report by the U.S. Army Inspector General noted that:

"It appears that some of the [enlisted] men under Sergeant E.G. Mundorf, 61st Co., Coast Artillery, obtained whiskey from the cars guarded by the [22nd] infantry men of Lieutenant [Russell V.] Venable's company."

But the Inspector General had high praise for

"the energetic work of Captain D.E. Aultman, Artillery Corps, commanding [the] 67th Co. Coast Artillery [from the San Francisco Presidio]...in preventing looting and arresting the artillery detachment of the 61st and 68th Companies, Coast Artillery [from Fort Baker]."

No disciplinary action was needed, however, for Sergeant Dillon's squad must have delivered exemplary service elsewhere under his able direction. Dillon's subsequent military career as a mustang would never have been possible if he had fumbled his duties on the San Francisco fire lines, or let his men get drunk as had his fellow Sergeant Mundorf. Sergeant William T. Dillon was no stranger to unusual military situations nor to civilian crowd control; he already had extensive experience with both in the Philippines, in China, and even in South Africa when he was called upon to lead his own dynamite squad in San Francisco on April 19, 1906.

EXPLOSIVES AVAILABLE IN 1906

The massive earthquake had shattered or ruptured many of the water mains running to fire hydrants throughout the city. Downtown, where the tallest buildings were, some of the narrower streets were so filled with fallen masonry rubble that the horse-drawn fire engines could not approach the few still-functioning hydrants not buried under tons of rubble. San Francisco firemen, consequently, had little with which to fight the fire that continued to spread, hour by hour. Firebreaks were needed, and if the growing fire could not be stopped with water, explosives would be used instead. Fighting fire with explosives in San Francisco was not a new nor an experimental idea in 1906. As early as May 4, 1850, explosives were used in fighting the second great fire in the City's history, which started near Portsmouth Square. It should be made clear from the outset that not all of the 1906 "dynamite" squads actually used dynamite. Stick dynamite, while the preferred explosive, was, over the three days of the fires, often in very short supply. It should also be understood that dynamite was never part of any official U.S. military ordinance stock. Few, if any, regulars were trained in its use, apart from Corps of Engineers personnel engaged in tunneling or road-building. Civilian contractors then, as now, were normally employed by the Army Corps of Engineers to do the "dirty work" of actual blasting on military projects, while Engineer officers stayed well back, checking their blueprints.

The explosives available for use in fire-fighting demolitions in San Francisco in April, 1906, were black powder, smokeless powder bagged up for use in artillery pieces, "giant powder" (a blasting powder of granulated dynamite), guncotton, nitroglycerine, and stick dynamite. Most present-day individuals, including a majority of historians, are unfamiliar with both artillery and with demolition work; they consequently do not understand the difference between these various explosives any more than did the average man on the street in 1906. This explains why inaccurate and erroneous reports about the explosives used to fight the 1906 fire are just as common as accurate ones. Modern, historically retrospective accounts today are full of century-old errors and misidentifications of the specific
explosives used in specific situations. Consequently, some definitions are in order.

**Black Powder**: was the explosive with the longest history of use still in U.S. Army ordnance stocks in 1906, despite having been obsolete for a decade. Black powder, a mixture of powdered charcoal, sulphur and saltpeter, had been invented in ancient China possibly as early as the 1st Century A.D. It was first used as a religious sacrament (mainly to scare away evil spirits), then found its earliest military use as a rocket propellant. Passing to the Arab lands via the Mongols by the mid-13th Century A.D., gunpowder was now being used in hand-portable grenades. It eventually arrived in post-Crusades Europe, by the early 14th Century A.D. where it found its first employment in primitive cannon. By the time of the Spanish Conquest of the New World, gunpowder was becoming an essential element in the arsenals of all European powers.

Black powder was the standard propellant for all muzzle-loading small arms and artillery in both the Old World and the New from its inception until the 1850s through the 1870s, when the shift to breech-loading cartridge arms began, still employing black powder inside the new, removable casings. Black powder had to be compressed to maximize its explosive potential. Its power was also influenced by its grain size. The "blasting powder" used to fight the 1850 San Francisco fire was simply very fine-grained black powder, all that was available to the hard-rock miners of the time. By 1857, Lamont Dupont had perfected a new, safer and more reliable "blasting powder" incorporating graphite, which became the mining industry standard: it was, however, still black powder. As all modern muzzle-loading enthusiasts know, black powder incorporates an inherent fire danger as burning, only partially combusted, charcoal sparks tend to spray downrange with each shot.44

The California Powder Works began operating the first black powder factory west of the Rocky Mountains in 1864 near Santa Cruz, California. Charcoal was made locally from trees cut in the Santa Cruz Mountains, saltpeter was imported first from Chile, and later, along with sulfur, from Sicily. The Dupont chemical company began investing in the California Powder Works in the late 1860s. The California Powder Works eventually became the largest single employer in Santa Cruz County.45 "Gunpowder" only began to be called "black powder" in the 1890s, when the advent of the new alternative, "smokeless" powder, necessitated the terminological distinction between the two. Black powder was employed at least once during the 1906 fire, with disastrous consequences. As anybody familiar with its properties can attest, black powder, if used to fight a fire, will have the reverse effect and start many small fires instead.

**Smokeless Powder**: was the replacement developed for black powder in cartridge-firing small arms, first in Europe in the 1880s, then later in America by the mid-1890s. Smokeless powder did not need to be compressed like its predecessor, it burned cleanly with little or no downrange sparking, and the clouds of black smoke familiar from black powder were now a thing of the past. Better termed a propellant than a true explosive, smokeless powder was, by weight and volume, many times more powerful than black powder. In American shotgunning circles, beginning in the 1890s, it was called Nitro Powder.

By the Spanish-American War of 1898, the U.S. Army had not fully converted to smokeless powder; some troops (Teddy Roosevelt's Rough Riders, for example) were issued the new, smokeless Krag-Jorgensen repeaters, while other soldiers (like W. T. Dillon and the First California Volunteer Infantry) were issued the old, single-shot, black powder Springfield .45-70 cartridge guns. Similarly, the old, Model 1888 black-powder 3.2 inch field gun was redesigned to take advantage of smokeless propellant, and designated the new Model 1897. By the time of the 1906 Earthquake and Fire, all regular Army and National Guard troops were using smokeless powder rifles, pistols, and artillery.

The California Powder Works at Santa Cruz was awarded a contract to make smokeless powder for the new U.S. .30-40 Krag rifle; they called their experimental product Peyton Powder, after the plant's assistant superintendent, William Peyton. Peyton smokeless powder, was made from nitrocellulose, nitroglycerine, and ammonium picrate: too corrosive for normal use, it was only produced for a few years, and abandoned in 1896. The company continued making both black and smokeless powders until its factory exploded in 1898, killing 13 and injuring 25: afterwards, production only resumed after all local residents had been permanently relocated. In 1903 the California Powder Works became a wholly-owned subsidiary of Dupont.
The most common and easily accessible explosive for use in the 1906 San Francisco fire-fighting efforts was the smokeless artillery propellant supplied by DuPont and the California Powder Works to the U.S. Army. This explosive was bagged up in standard volumetric increments for use in the army's most portable field artillery pieces, the ubiquitous model 1897 3.2 inch horse-drawn cannon (Figure 15). In fact, the common nick-name for the 3.2 field piece was the "bag gun."

Much bigger variants of the bag gun smokeless powder charges were those already made up for the very large, up to 12-inch, coastal defense guns guarding the approaches of San Francisco's Golden Gate (Figure 3). Instead of just a few pounds each, the big 12-inch propellant charges were too heavy for a single man to lift. Most such large charges were stored at the gun batteries themselves, but a substantial reserve was also at the San Francisco Presidio, under the watchful care of the Post Ordnance Officer. Single or multiple bagged charges were used to propel the shells from the big guns depending upon the range at which the shots were made; partial increments smaller than a single bag were made up by experienced gunners so as to "fine tune" shots for increased accuracy.

The smokeless powder used by the Field and Coast Artillery in 1906 was more propellant than explosive, and would not have been suitable for architectural demolition unless it could have been tamped into small holes prepared for it. Such time-consuming preparation would obviously have been impossible under the urgent circumstances of the three-day fire-fighting effort in April 1906. If bagged charges were used, and there is no evidence that they were, then they would have simply flashed and burned as much as they would have exploded.

Guncotton: or nitrocellulose, was another European invention that later passed to America. It was supposedly discovered by accident in the mid-1840s, when cotton fabric was dampened with sulfuric and nitric acid, and later ignited spontaneously. Guncotton preceded the development of dynamite as an explosive for hard-rock blasting, and was even more powerful, with around six times the force of black powder. British ordnance experts began experimenting with guncotton in the mid-1860s, hoping to produce a viable smokeless artillery propellant and underwater torpedo explosive, but the French were the first to perfect guncotton in stable form for cannon in the mid-1880s. In British Naval applications the new artillery propellant was called Cordite.

Within ten years, all the modern navies of the world were using guncotton as the propellant of choice in their modern warships' cannons. It was kept in bags of size, weight and volume specific to the gun employed, similar to the smokeless powder charges just described. Highly flammable, somewhat unstable, and occasionally subject to spontaneous combustion, guncotton was never popular as a propellant for land-based artillery. It certainly was never used for small field-pieces where by necessity it would have bounced around inside horse-drawn limbers.

The U.S. Navy developed and patented its own nitrocellulose propellant in the early 1890s, and licensed the California Powder Works to produce it at their Santa Cruz factory. At the time, the CPW was one of only two factories supplying the entire U.S. Navy. This private company was even provided with naval cannon with which to test-fire its product for quality control on its own Santa Cruz artillery range. The closest source of guncotton to San Francisco in 1906, apart from the factory at Santa Cruz, would have been in the naval ordnance stores at Mare Island approximately 25 miles away by water. The U.S. Navy big-gun propellant charges used on the final day of the fire were termed "guncotton" by most contemporary (1906) writers like Morris. Such explosive material would never have been "loose" but would also have been kept in pre-measured, bagged units as described earlier.

Dynamite: Nitroglycerine was invented by the Italian chemist Ascanio Sobrero in 1846. Nitroglycerine was an explosive liquid at least five times more powerful than compressed black powder. It revolutionized the mining industry world-wide, and made all modern high-explosives such as dynamite possible. The Swedish chemist Alfred Nobel began working with nitroglycerine in 1859, calling it "blasting oil" and streamlining its manufacturing and refining processes. Highly unstable and easily set off, when admixed with a stable, inert base, such as diatomaceous earth, or even sawdust, the explosive properties of nitroglycerine could be more safely harnessed: dynamite was the result. Nobel's invention took place in the mid-1860s, and was followed up by his invention of the modern igniter, detonator, or "blasting cap" in 1867. The detonator
THE DYNAMITE SQUADS

Most contemporary accounts of the great San Francisco disaster simply refer to the demolitions men as "the dynameters" without identifying them as to organizational affiliation. Very few written accounts or reminiscences specifically identify individuals or even groups as to their parent unit. Notwithstanding the paucity of specific attributions, we have been able to identify perhaps as many as sixteen separate demolition squads acting independently of each other at different places and times. This is almost certainly not a complete list, for we are convinced that several other squads were at work, unremarked in the official documentation and unidentified by eyewitnesses.

The demolition squads worked under at least four separate and independent chains of command. Over the three days of the 1906 fires, all of the demolition squads were under the nominal authority of Mayor Schmitz, his two Acting Fire Chiefs John Dougherty and Patrick Shaughnessy, and General Funston. At least one demolition squad, that led by Artillery Captain Le Vert Coleman and Lieutenant Raymond Briggs, worked for all three days of the fires. Most of the other squads worked for shorter periods of time. One demolition crew tried its hands with explosives only once, while two more stood ready with their dynamite but never used it.

The work of all the different demolition squads was, from start to finish, by trial and error. The relative effectiveness of the different squads was mainly a function of the type of explosive employed and the level of experience on the part of the people setting it. Years before the great fire, the prescient San Francisco Fire Chief Dennis Sullivan had proposed a rigorous course of training for his firemen in the use of dynamite as a fire-fighting weapon, and stockpiles of the explosive in readily accessible locations; neither recommendation was ever carried out. Compounding the problem was that once Chief Sullivan was mortally injured, at the onset of the disaster, the demolition effort was deprived of its most far-thinking potential advisor and the person, had he lived, who would have been the natural choice for its leader.

Some of the demolitions men were very fast learners, and mistakes made early on in the effort were not repeated. Unfortunately, because of the multiplicity of demolition squads operating out of contact with each other, and frequently beyond the control of any centralized authority, newer squads consistently repeated the same errors already corrected by more experienced ones. Only a single dynamiter was killed during the three-day firefighting effort, a remarkable safety record given the confusion of authority and the inexperience of most of the demolition men.

Despite diligent searching, we have been able to find only about a half-dozen photographs of dynamite squads in action during the 1906 San Francisco Fires: all are reproduced in these pages. We are hopeful that circulation of the present paper will "flush out" other contemporary photos and/or written accounts by dynamite squad participants. We have not included other photos which show buildings coming down through dynamiting, some as late as May, 1906, long after the fires were out. Nor do we include others showing the effects of dynamite on demolished or partially demolished buildings, possibly taken as evidence for insurance claims against the military.

U.S. ARMY DEMOLITION SQUADS

Artillery Captain Le Vert Coleman relates how the initial request for explosives to be used in fighting the growing fire was received by the San Francisco Presidio:

"About 6:30 a.m. the morning of the earthquake April 18, 1906, the Fire Department of the City of San Francisco sent a messenger to the Presidio requesting that all available explosives, with a detail to handle them, be sent to check the fire as the earthquake had broken the water mains and the fire department was practically helpless.

I reported with the [S.F. Fire Department] messenger to the Commanding Officer Colonel Charles Morris, A.[rtillery] C.[orps], who ordered me as Ordnance Officer to provide the necessary explosives. I then sent about forty-eight barrels of powder in field battery caissons under the charge of 1st Lieutenant Raymond W. Briggs, A.[rtillery] C.[orps], to the Mayor."*9

The "powder" sent by Coleman with Briggs has
been variously reported as either black powder or giant powder. It was almost certainly black powder, as there would have been no reason for granulated dynamite to have been in the Presidio's ordnance stocks. Both Coleman and Briggs simply complied with what both doubtless considered an ill-advised order, knowing that black powder was the wrong explosive to fight fires with.

The field battery "caissons" that the powder was ordered sent on were otherwise known as gun limbers. Independent confirmation of the arrival of the field artillery limbers was provided by eyewitness Charles Keeler on the morning of 18th:

"Now troops of artillery are hurrying down Montgomery Street with rattling caissons. Boom! - a dull muffled roar sounds from the midst of the fire. It is the first charge of dynamite."50

Lieutenant Briggs' account is somewhat different from Captain Coleman's. He amplifies Coleman's statement in noting that the explosive his men loaded up was black powder, and instead of "caissons" states that he was ordered to

d'take the kit wagons of the field batteries stationed here [at the Presidio], load them
with black powder, wire, fuse, etc., and report to the Mayor of San Francisco to assist in blowing up buildings to arrest the fire."51

The "kit wagons" were the large four-wheeled supply wagons, normally drawn by a four-mule team, from which the limbers or caissons were kept supplied and which could contain large and bulky items that would not comfortably fit inside the much smaller, two-wheeled limbers.

Lieutenant Briggs

"...reported to the Mayor as soon as practicable. The use of this [black] powder was naturally not desired if stick dynamite could be procured...some of the latter [dynamite was] on hand at the discharge camp, Angel Island, [and] this was sent for.

"Upon its [the dynamite's] arrival, in conjunction with a battalion fire chief, a fire commissioner (name not recalled), and I believe, Mr. A. Ruef, I
went to Montgomery Street and began the destruction of such buildings as were agreeable to these gentlemen.\textsuperscript{52}

Briggs was not only accompanied by Boss Ruef and Fire Department higher-ups, but also by three San Francisco Firemen specifically assigned to him:

"Batt.[alion] chief M. O'Brien ordered us [Engine #28, stationed at Stockton and San Francisco Streets] to detail three men to assist Lieu't Briggs of the Presidio, in dynamiting. I detailed [San Francisco Fire] Lieu't McGowan, [and fireman] A. Stoffer and A. Bernstein; these men assisted in the dynamiting which occurred on the south side of Clay st., along Leidesdorff; Commercial east of Montgomery along Leidesdorff; Sacramento east of Montgomery along Leidesdorff; to Halleck Sts."\textsuperscript{53}

Lieutenant Briggs provides very specific information on the locations of the first building to be dynamited as a fire-prevention measure: this was on the east side of Montgomery Street, on its corner with Commercial Street, only three or four doors away from buildings already aflame. Unfortunately, after blowing only two buildings, the second one on Commercial Street between Kearny and Montgomery, Briggs' supply of stick dynamite ran out:

"Here the supply of stick dynamite gave out, some of that which arrived from Angel Island evidently having been sent to other points on the fire."\textsuperscript{54}

Lieutenant Briggs' comment reveals that at the very beginning of the attempt to fight the fire with explosives, early on the morning of April 18th, multiple demolition squads were already at work, completely outside of the Funston-Morris-Coleman-Briggs chain of command.

Meanwhile, Captain Kelly of the Fort Mason
Engineers, one of the very first officers mobilized on the morning of the 18th, was now sent considerably south of where Briggs was working:

"We were first stationed along Montgomery St. from Sacramento to Market. The crowd was most orderly and we had no trouble at all till we had to move them back a block to get them out of the way of the fire department and dynamite squad. Then every man had left papers of immense value in his office and had to get through... A little after noon we managed to get in a boat load of dynamite but it was not used to much advantage. They [the dynamiters] worked too close to the fire and used no tamping so that little was accomplished except to splinter the buildings and make them burn quicker and to break all the windows within a radius of 5 blocks."55

Kelly's comment not only reinforces the fact that at least two Army demolition squads were working simultaneously during the early hours of the fire on its first day, but also that explosives were already being obtained from as many sources as possible from almost the onset of the fire.

As observed by Kelly, not everybody knew what they were doing with explosives. At least some of the dynamite noted as missing by Lieutenant Briggs ended up in tragically inexperienced hands, yet another U.S. Army demolition squad activated even before Captain Kelly was:

"Lieutenant Charles O. Pulis, commanding the Twenty-fourth Company of Light [Field] Artillery, had placed a heavy charge of dynamite in a building at Sixth and Jesse Streets. For some reason it did not explode, and he returned to relight the fuse, thinking it had become extinguished. While he was in the building the explosion took place, and he received injuries that seemed likely to prove fatal, his skull being fractured and several bones broken, while he was injured internally."56

Some accounts state that 30-year-old Lieutenant Pulis was killed outright, others that he subsequently died from his injuries, yet another that he recovered. The first report of the Pulis tragedy was on page 4 of the combined San Francisco Call-Chronicle-Examiner joint issue put out on April 19, 1906: its headline stated that Pulis had been killed, but the text then states that he was taken alive to the Presidio and was not expected to recover. We believe that there is little doubt that Pulis was the first and only operational fatality within the dynamite squads. An eyewitness account of the Lieutenant Pulis disaster was published by San Francisco Police Sergeant John Lainsbury, a member of Pulis' dynamite squad, in the Argonaut twenty-one years after the event. Lainsbury stated that it was black powder, not dynamite, that failed to explode, and noted that his superior, Police Captain Henry Gleeson, was also badly injured, but made a full recovery.

Jesse Street was two short blocks south of Market, and 6th was directly opposite Taylor Street at its Market Street terminus: only one long block, as the crow flies, from San Francisco's brand-new City Hall, itself badly damaged by the earthquake. Pulis' demolition squad was therefore working at quite some distance from where Briggs was dynamiting his own buildings.

The initial load of dynamite obtained from Angel Island was shortly thereafter augmented by a "large amount" received from the California Powder Works: this was the "boatload" mentioned by Kelly. Meanwhile, back at the Presidio, Colonel Morris decided that he would be more properly employed on the fire front, so he left his post and headed downtown to the business district. Here, at the direct request of Mayor Schmitz, he passed the order to the regular Army troops under his command to establish a cordon at least one block back from any buildings that were to be demolished through the use of explosives.57

Captain Coleman by this time likewise concluded that his duty lay more appropriately on the fire line instead of at the Presidio. He also was no doubt aware that the black powder he had sent with Briggs was likely to be of very little use, although he does not admit to this in his report. Presumably in response to Briggs or someone in his party informing either Schmitz or Funston about the lack of stick dynamite, Coleman decided that:

"As the caissons [sent with Briggs to the business district] were not suited to
carrying large amounts of explosives I procured two large wagons, and, having loaded them with the remaining powder and with about 300 pounds of dynamite procured from the civilian employees of the Engineering Department—the only dynamite procurable at the time—I reported to the Commanding Officer Charles Morris, A.[rtillery] C.[orps], on O'Farrell Street. By his orders I immediately proceeded to the Hall of Justice and reported to the Mayor.58

Here I found Lieutenant Briggs with the powder I had sent, and also a large supply of dynamite provided by Mr. Birmingham [sic: John Bermingham, the Superintendent] of the California Powder Works. General Funston, and the Mayor, who were both present at the time, placed me in charge of the work of handling all the explosives.59

Coleman had ridden into a three-ring circus. Mayor Schmitz and Abe Ruef were giving contradictory orders independently of and without consulting each other, bypassing the formal San Francisco Fire Department chain of command. Both were also subsequently countermanding each other's orders. All the while General Funston and Colonel Morris

Figure 10: Close up of regular Army soldier watching the fire advance up Market Street on the afternoon of April 18, 1906. Note the magneto plunger box used to set off explosives by electrical current. The structure at left is the Mutual Savings Building on the corner of Market and Geary. This shot is from the same episode as recorded in Figures 8-9, probably by the second photographer shown in those photos. From a stereo pair published by the Ingersoll View Company, St. Paul, MN.
hovered nearby, attempting to keep the lines of authority to the U.S. regulars clear. Throughout the first day Briggs, then later Coleman, would propose that a specific building should be dynamited as a firebreak, and obtain approval from a Fire Department official only to have it overruled by the Mayor or by Abe Ruef, neither one of whom wanted any building not actually yet on fire to be dynamited. As Captain Coleman stated in his formal report:

"During the first day of the fire, and until the evening of the second day, the city authorities withheld their permission to blow up buildings except those in immediate contact with those already ablaze. Consequently, although we were able to check the fire at certain points, it outflanked my party time and again, and all our work had to be begun over."

Over and over again, buildings that were already "goners" were dynamited too late to halt the progress of the flames, not because the Army wanted to proceed this way, but because they were hamstrung, strictly observing the niceties of pettifogging, interfering, ill-considered civilian control. Meanwhile, at the same time, other dynamite squads, out from under the watchful eye of Mayor Schmitz and Boss Ruef, and certainly without the authority of Captain Coleman, were blowing up buildings in other parts of the city without any bureaucratic interference.

Figure 11: A six-man dynamite squad at work in the post-earthquake rubble of San Francisco during the great fires of April 18-21, 1906. This squad consists of a San Francisco City Police officer (left), possibly Sergeant J.H. Morrissey, four U.S. Army Regulars, and a single civilian (right). Note the dynamite sticks being secured to columns at center. Photo (#188) by James D. Givens, originally published on page 48 of his 1906 "San Francisco In Ruins" Photo-Essay, with the caption: "Dynamiting Crew of Regulars Destroying Buildings to Retard the Progress of the Flames." California Historical Society/University of California, Berkeley, Bancroft Library.
Also on the morning of the 18th civilian John Bermingham, the Superintendent of the California Powder Works, was ordered by Mayor Schmitz to assist Captain Coleman in his demolition efforts, mainly because it was his dynamite that would be used. Captain Coleman wisely declined his assistance because:

"he was so far under the influence of liquor as to be of no service, and, lest he should in that condition cause serious accident, I sent him away."

No sooner had Coleman deflected the attempt of the Mayor to press the inebriated Bermingham upon him, than Lieutenant Briggs was in turn faced with bureaucratic pressure from the civil authorities to obey a stupid order he knew to be wrong:

"A number of wagons came up loaded with giant powder—dynamite in granular form—but I hesitated to use this, knowing that its combustion was a matter of flame and that any building destroyed by it would, in addition, be set on fire, as would also result if black powder were used. "I was urgent as a last resort to use it, however, and consequently I destroyed a building on the west [side] of Kearny [Street] at the corner of Clay and also the one adjacent. Both immediately caught on fire, and in the second, which had been a cheap lodging house, bits of bed clothing, etc., which had become ignited at the combustion were thrown across Kearny [Street] to the west side, and soon that block was on fire."

This resulted in all of San Francisco's Chinatown being set alight unintentionally:

"In an attempt to stop the blaze from spreading west of Kearny Street—one of several thoroughfares mainly designated as firebreaks—a demolition crew planted a charge of black powder [sic] in a drugstore on the corner of Kearny and Clay Streets when they ran out of dynamite. When the charge was ignited the blast sent burning grains of powder and shredded, blazing bedding flying across Kearny Street from the windows of an upstairs room. The far side of the street was quickly aflame and Chinatown was doomed. It was a tinder-dry wooden city."

Briggs does not reveal who overruled his decision and "urged" him to use giant powder. However, if Abe Ruef was still with Briggs' dynamite squad, then doubtless as the Mayor's temporary mouthpiece and full-time legal counsel and puppeteer, it would have been him. Alternatively, it may have been Captain Le Vert Coleman himself, at the direct order of either Mayor Schmitz or Abe Ruef. Coleman had just arrived on the fire line, and took over:

"As you [meaning Captain Le Vert Coleman] assumed charge of the party during the destruction of these latter buildings, this completes my report."

Lieutenant Briggs then continued working with this U.S. Army artillery demolition squad for the full three days of the fire, as Coleman's subordinate. Civilian motorist and eyewitness Charles Keeler observed how the Army began to "clear the decks" on Market Street, preparatory to expanding their demolition work to this new area:

"The ominous boom of dynamiting sounded intermittently. A company of Cavairy clattered down Market Street from the direction of the smoke-cloud, driving the crowds off into the side streets."

Eyewitness Keeler, still on the morning of April 18th, then recorded a second regular Army dynamite squad (see Figure 7) in action:

"Regulars with cases of dynamite on their shoulders ran [across Market Street] to the unfinished Monadnock Building, but neither earthquake, blasting, nor fire seemed to make much impression on this structure."

The earthquake had completely demolished many buildings on Market Street, but had only cracked the facades of others. The subsequent fires completely destroyed some buildings that escaped
the earthquake unscathed, and gutted others that would be quickly rebuilt later.

The U.S. Army fire-fighting effort began with all of the principals, including General Funston, Colonel Morris, and Captain Coleman, on horseback. It also initially relied, as we have seen, upon horse-transport to move explosives to the fire line. All involved very quickly realized the inherent limitations of using horses in a burning city with streets already full of dead draft animals. Consequently, the Army officers began shifting to automobiles as their primary means of communication and of safe explosive transport by the afternoon of April 18th. This was the first use, anywhere in the world, of motor vehicles in military operations.

Where automobiles and their drivers could not be hired, they were commandeered. The reliable eyewitness Charles Keeler again noted that on the first day of the fire:

"Automobiles rushed madly back and forth with artillery officers carrying loads of dynamite. In vain they blasted building after building, for out of the very ruins sprang the hungry flames to continue to work of devastation."

Assuredly, at least one junior officer or senior non-com would have been assigned to any car commandeered for dynamite hauling to direct its driver to the source of dynamite, and to safeguard it back through any Army or police cordons to where the explosive was needed most. Keeler, on his way to be deputized by Mayor Schmitz as a "special officer" on the morning of the second day of the fire, was one of the civilians whose automobiles were requisitioned for use as a dynamite hauler:

"In a jiffy we were... on to California Street and up to the summit of Nob Hill."

Figure 12: The Dynamite Squads at work. Blowing up William Randolph Hearst's Examiner Building in a view down Third Street towards Market, on the morning of April 18th, 1906. Note the distinctive cupola of the Call Building's tower just visible above the ten-story structure at left, and the top of the Mutual Savings Building above the smoke and dust cloud at center. Already, by late morning of the fire's first day, crowd control by the U.S. Army was effectively keeping spectators away and allowing the dynamite squads to work unhindered. Photo courtesy of the Bancroft Library, University of California, Berkeley.
The Mark Hopkins Institute of Art was afire, and Lieutenant C. C. McMillan was saving the pictures, driving people to work at the point of his revolver when they stopped to question his authority. Artillery officers ran up to us asking for more dynamite, as their supply was exhausted, and our automobile was soon speeding away for more.  

"About ten the next morning [April 19th] a militia [California National Guard] officer came along and informed me that the Mayor desired all the regular troops that could be spared to take charge of the dynamiting of the buildings on Van Ness Avenue where a final stand would be made. . .so I went to Col. Dyer, Artillery Corps, who was in command of that district [Jefferson Square] and asked him to give us the job. He gave the necessary orders.
and I went at once to see the Mayor. I
found the Mayor and his cohorts
without plans regarding the dynamiting
except that they had sent the Steamer
McDowell to the powder works to bring
down 2 tons of giant powder, which was
due to arrive at Fort Mason about noon.
They were tickled to death at the prospect
of having a company of engineers to do the
work for them. . . . But orders reached
us from General Funston to return to the
post [Fort Mason] at once. I was sorry not
to have a chance at the dynamiting but the
men were about all in. . . .

Once back at Fort Mason, Kelly was directed by
Captain Walker to

". . . take charge of the demolishing,
should it become advisable, of a large
warehouse. It was the only building near
enough to endanger the post. I picked out
a detail of 8 privates and 2 non-coms from
my company and got the dynamite and
other materials ready to use as a moment's
notice. . . . About 5 A.M. [on the morning
of the 20th] . . . the fire was coming over
the hill toward us very rapidly. I got up,
routed out my detail and explosives and
went to the warehouse. We completed
arrangements for demolishing the building
and waited around for about an hour. By
that time it became evident that the fire
would not reach the post for at least four
or five hours so I turned in the detail and
it never afterwards became necessary to
use it."

From Charles Keeler's accounts, coupled with the
contemporary photographs reviewed (Figures 7-9)
it would appear that in addition to the Coleman/
Briggs Artillery dynamite squad that began working
in the city's business district, and the abortive
Lieutenant Puls Engineer squad working south of the
slot, and Captain Kelly's squad of engineers that was
never actually deployed, at least one or possibly even
two other squads composed of artillerymen were
at work, simultaneously atop Nob Hill, and down on
Market Street proper. So, from the outset, there
were at least two, and possibly as many as four or
five regular Army dynamite squads operating on the
first two days of the fire, long before the fire lines
had moved westward to Van Ness Avenue.

On the third and final day of the fires, all of
the U.S. Army demolition squads had retreated to
Van Ness Avenue, where the widest north-south
street west of the fire area had been chosen as the
best natural firebreak at which to stop the flames.
Artillery Colonel Morris was the ranking Army
officer present, and on his own authority ordered
Captain Coleman to do what should have been done
from the outset; dynamite buildings well in advance
of the flames to create real firebreaks. Dynamiting
of unburned buildings finally began in earnest, to
almost universal disapproval by their owners, who
remonstrated not only to Morris, but to General
Funston, Mayor Schmitz and Abe Ruef as well.
Deaf to all protests, Morris ran interference for
Coleman, and Coleman in turn ran interference
for his own dynamitors. Here the fire was finally
stopped, as recounted by General Funston:

"On the night of the 19th, when the
fire reached Van Ness avenue, Col. Charles
Morris, Artillery Corps, in command
of the troops in that portion of the
city, authorized Capt. L'Vert Coleman,
Artillery Corps, in direct charge of the
detachment engaged in the destruction
of buildings, to destroy a number [of]
buildings far enough ahead of the fire
to make a clearing along Broadway, Franklin,
and Gough streets, which space the fire
was unable to bridge, and in this manner
was stopped after it had crossed Van Ness
avenue and the fire department seemed
powerless. It is my opinion that if it had
not been for the work done at this place
the entire Western Addition of the city
would have been destroyed."

The final, climactic, dynamite assault on the fire
took place at:

". . . the great battle-field of Van Ness
Avenue. Here the last desperate fight
was made by the half-dead firemen,
the professional and amateur dynamitors,
the blackened engineers, and military and civil
chiefs of the city. It was here that the
automobiles loaded with dynamite rushed
in their perilous loads."
Sergeant Dillon’s coast artillery dynamite squad worked on the second and third days of the fire, under the command, but not necessarily the eye, of Captain Le Vert Coleman. Dillon blew up buildings just ahead of the flames in an often futile effort to stop them from spreading, but he was also one of the dynamizers who was finally able to defeat the conflagration at the Van Ness Avenue fire line. Despite his presence, nowhere in the official post-fire accounts is he or his men mentioned by name. As usual, in this battle against the flames, the enlisted men did the dirty work, while the officers got the credit. Very few contemporary newspaper articles identify regular Army enlisted men, even non-coms, on the fire lines by name. Officers, on the other hand, are prominently mentioned, often in glowing terms. To the uncritical reader, this might convey the impression that most of the fire-fighting was done by officers, and little by enlisted men.

This, of course, is the exact opposite of what actually occurred. The majority of military officers present in San Francisco during the fires were doing staff work, not actually getting burned by falling embers, or running wires to explosive charges. Enlisted men involved in fire-fighting, especially in the context of the dynamite squads, greatly outnumbered the officers, yet went largely unremarked by the contemporary press. Their names are also missing from the subsequent reports. This was in keeping with the custom of the times; reporters followed the lead of most officers who insisted that enlisted men should be seen, but not heard. In any event, this was also how most civilians wanted their soldiers: happy, hardworking, loyal, but, most importantly, silent and anonymous.

Part two of “Sergeant Dillon With the Dynamite Squads: 1906” will appear in the next issue, CTQ#92.

ACKNOWLEDGMENTS

Historian John A. Martini, former Curator of Military History at the Presidio of San Francisco and Supervisory Ranger for the Marin Headlands, provided invaluable assistance within the historical contexts he knows better than any other authority. Historian Russ Pearce’s constant encouragement, helpful research suggestions, and insight into the workings of the U.S. Army of a century ago set us on the right track time after time. Our compadre, the late Dr. Michael Mathes, read earlier versions of our manuscript and his corrections and suggestions kept the self-embarrassment quotient of the preceding pages down to a minimum. Tommy Killion, Brian’s good friend since they both became Mill Valley Cub Scouts in 1961, graciously let us borrow the term he coined as the title of his outstanding first book, “Fortress Marin” (Figure 1).

The Bancroft Library at our alma mater shared its invaluable holdings on the 1906 disaster. Gladys Hansen, the greatest living authority on the San Francisco Earthquake and Fires, shared her insights on the activities of the dynamite squads during that catastrophe, and sent us copies of original documents bearing on the subject. We also made very great use of Hansen’s Museum of the City of San Francisco, particularly its photographic holdings and unpublished eyewitness documents, and are thankful for this wonderful resource. We are grateful to our friends at the Sausalito Historical Society and the Marin County Free Library’s Ann T. Kent California Room, who provided access to unique documents unavailable anywhere else. The Veridian Digital Library Software Program put facsimile issues of the Sausalito News, the San Francisco Call, and other contemporary newspapers at our fingertips; we gratefully acknowledge this “wave of the future” means of conducting historical research.

Finally, and most importantly, retired U.S. Army Colonel John A. (Jack) Dillon (1915-2001), W.T. and Mabel’s second son, suffered through numerous interviews over a twenty-year period, answering many questions about his father’s military career and attitudes. It was Jack Dillon, after all, who asked his dad why he blew up San Francisco in the first place, and with this innocent question nearly 80 years ago began the process culminating in the present writing.

ABOUT THE AUTHORS

Richard Hugh Dillon, the youngest of William T. and Mabel Burke Dillon’s four sons, was born in Sausalito, California, in 1924. His nick-name while a teenager was Duke Lépez. He obtained an MA from UC Berkeley in Mexican History in 1949. Richard H. Dillon is a prize-winning historian with more than two-dozen hardcover non-fiction books published, most of which have gone into paperback. He is also
Figure 17 (From left): Authors Richard H. Dillon, Brian Dervin Dillon, and John Dervin Yi An Dillon, the son, grandson, and great-grandson of William T. Dillon and Mabel Burke Dillon. Allester Dillon photo, Fort Baker, California, 2008.

the author of hundreds of short magazine and journal articles and uncounted book reviews.

His oldest son, Brian Dervin Dillon, was born in Oakland, California in 1953: his middle name is his grandfather’s original patronymic. Brian earned a Ph.D. in Maya Archaeology in 1979, at age 25 the youngest in the history of his U.C. Berkeley Department. A Phi Beta Kappa and Fulbright Fellow, Brian is widely published in Central American and in California archaeology.

His son, John Dervin Yi An Dillon, was born in Santa Monica, California, in 1990. John was named for his Great-Uncle John A. ‘Jack’ Dillon, who, 75 years earlier, had himself been named for John J. Pershing. John also carries the old Dervin family name. He graduated as a History Major at UC Berkeley in 2012. Appropriately, in light of William T. Dillon’s Chinese (1900) and Mexican border (1914-1917) service, John Dervin Yi An Dillon is one of W.T. Dillon’s five great-grandchildren, two of whom are half-Chinese, with roots in Hawaii, the other three being half-Mexican, with roots in Mexico.

END NOTES


2. U.S. Army’s “dynamiters in their seeming passion to destroy”: Lafler 1906.


4. Fictional Account: Dare, in Wilson, 1906.


7. Contemporary Newspaper or Magazine Articles, and Books: Amador Ledger 1906: Funston 1906: Keeler 1906: Morris 1906: San Francisco Call 1906a; 1906b; 1906c; 1906d; San Francisco Chronicle 1906; Sausalito News 1906; Stephens 1908; Stetson 1906b: Virtual Museum of the City of San Francisco 1906a; 1906b: Wall 1906: Wilson 1906. We enthusiastically endorse Fradkin’s (2005: 265) observation that newspaper coverage of the disaster “veered back and forth from the relatively sane to the hysterical.”


9. Contemporary Photographs: Genthe 1906 (in Bronson, 1959); Givens 1906: Monaco 1906 (in Dillon, 1985). The 1906 San Francisco Earthquake and Fire was the first major natural disaster to be extensively photographed and even filmed by multiple photographers. These photographs and short films provide one of the most significant primary historical resources for the study of the event. Three of the best collections of such graphic documentation, as well as primary documents in the form of eyewitness accounts, are held by the Bancroft Library of the University of California, Berkeley; by the Museum of the City of San Francisco; and by the California Historical Society of San Francisco.

Unfortunately, some contemporary photos taken before, during, or immediately after the fire were altered as early as April 1906, to increase their “dramatic effect.” Hand-colored flames were added to buildings not actually on fire at the time of exposure, some buildings that had survived the earthquake were artistically “crumbled” while others that had fallen were miraculously resurrected.

The greatest problem in historic photo interpretation, however, is separating out those exposures made during the three days of the fire-fighting effort from those made immediately afterwards. For example, Bronson (1959: 163) includes smaller versions of our own Figures 12 and 13, implying that the dynamiting of the Hearst Building took place long after the fire. A comparison
the author of hundreds of short magazine and journal articles and uncoun ted book reviews.

His oldest son, Brian Dervin Dillon, was born in Oakland, California in 1953: his middle name is his grandfather's original patronymic. Brian earned a Ph.D. in Maya Archaeology in 1979, at age 25 the youngest in the history of his U.C. Berkeley Department. A Phi Beta Kappa and Fulbright Fellow, Brian is widely published in Central American and in California archaeology.

His son, John Dervin Yi An Dillon, was born in Santa Monica, California, in 1990. John was named for his Great-Uncle John A. "Jack" Dillon, who, 75 years earlier, had himself been named for John J. Pershing. John also carries the old Dervin family name. He graduated as a History Major at UC Berkeley in 2012. Appropriately, in light of William T. Dillon's Chinese (1900) and Mexican border (1914-1917) service, John Dervin Yi An Dillon is one of W.T. Dillon's five great-grandchildren, two of whom are half-Chinese, with roots in Hawaii, the other three being half-Mexican, with roots in Mexico.

END NOTES

2. U.S. Army's "dynamiters in their seeming passion to destroy": Lafler 1906.
4. Fictional Account: Dare, in Wilson, 1906.
6. Official Reports on the 1906 Fire-fighting Efforts: Bowlen 1906; Briggs 1906; Carey 1906; Coleman 1906; Conlon 1906; Devol 1907; Duke 1910; Freeman 1906; Greely 1906; Haan 1906; Humphries 1906; Koster 1906; Lawson 1908-1910; Merrill 1906; Murphy 1906; Nichols 1906; Radford 1906; Russell 1906; Schmidt 1906; Shaughnessy 1906.
7. Contemporary Newspaper or Magazine Articles, and Books: Anador Ledger, 1906; Funston 1906; Keeler 1906; Morris 1906; San Francisco Call 1906a; 1906b; 1906c; 1906d; San Francisco Chronicle 1906; Sausalito News 1906; Stephens 1906; Stetson 1906a; Virtual Museum of the City of San Francisco 1906a; 1906b; Wall 1906; Wilson 1906. We enthusiastically endorse Fradin's (2005: 265) observation that newspaper coverage of the disaster "veered back and forth from the relatively sane to the hysterical."
8. 1906 Letters, Correspondence, Diaries: Kelly 1906; Laveaga N.D.; Stetson 1906a.
9. Contemporary Photographs: Genthe 1906 (in Bronson, 1959); Givens 1906; Monaco 1906 (in Dillon, 1985). The 1906 San Francisco Earthquake and Fire was the first major natural disaster to be extensively photographed and even filmed by multiple photographers. These photographs and short films provide one of the most significant primary historical resources for the study of the event. Three of the best collections of such graphic documentation, as well as primary documents in the form of eyewitness accounts, are held by the Bancroft Library of the University of California, Berkeley; by the Museum of the City of San Francisco; and by the California Historical Society of San Francisco.

Unfortunately, some contemporary photos taken before, during, or immediately after the fire were altered as early as April 1906, to increase their "dramatic effect." Hand-colored flames were added to buildings not actually on fire at the time of exposure, some buildings that had survived the earthquake were artistically "crumbled" while others that had fallen were miraculously resurrected.

The greatest problem in historic photo interpretation, however, is separating out those exposures made during the three days of the fire-fighting effort from those made immediately afterwards. For example, Bronson (1959: 163) includes smaller versions of our own Figures 12 and 13, implying that the dynamiting of the Hearst Building took place long after the fire. A comparison
of our Figures 6 and 7, however, show the Hearst Building standing before the dynamite squads went to work on April 18, but blown down later that same first day of the fires.


A great resurgence of interest in the 1906 disaster began to appear in book and article form as the centennial of the event approached. Some magazines (National Geographic, Westways, etc.) devoted their April, 2006 issue to remembrances of the great earthquake and fires of a hundred years earlier. Even a well-written and entertaining book of fiction (Dallesandro 2004) set against the great disaster appeared, followed, surprisingly enough, by a quasi-documentary film based in large measure upon this same novel.

Some of the contemporary (1906) accounts are so self-serving or so wildly impressionistic and inaccurate as to be best considered historical fiction. Similarly, some of the more recent treatments employ the great disaster mainly as background for historical fiction, or simply as a vehicle for Army-bashing in dogmatic, post-Vietnam, anti-military fashion. Others take a more balanced view, and explore all sides of topics that remain controversial after more than a century. As with most significant historical events, no single book can provide all the information needed by any objective researcher. The reader must, as always, separate evidence from interpretation, and fact from fiction.

12. Hogback Ridge: The "hogback," the north-south trending ridge to the immediate west of Sausalito, has been called "Wolfback Ridge" since the 1950s, when realtors, hoping to sell very expensive homes with unparalleled views of San Francisco, unsullied by the porcine geonymic, changed the name. On the night of April 19th, "the updraught of the fire had become strong enough to carry shingles, paper, etc., as far as Sausalito, 7 miles away, against the light breeze that was blowing." (Kelly, 1906: 5).

13. Mabel Burke's San Francisco High Schools: Mabel Burke attended the two most historic high schools in San Francisco, if not the entire state. She went to Girls High on Scott Street between Geary and O'Farrell from 1897 to 1899. Girls High was created in 1864 when the only High School in town, San Francisco High, was divided into separate schools by gender. In 1899 Mabel moved on to Lowell High School on Sutter Street between Gough and Octavia. Lowell began in 1856 as a grammar school. Two years later it became San Francisco High, and finally changed its name to Lowell in 1894. Mabel Burke graduated with the class of December, 1901, which numbered ten boys and eight girls. One of her classmates was Japanese; five years after their graduation Japan and the United States would veer almost to the brink of war over the racist decision of the San Francisco School Board to segregate Japanese students from white ones. On a happier note, a year earlier than her own graduation, in 1900, one of Mabel's slightly older classmates, the celebrated Rube Goldberg, completed his schooling at Lowell. Girl's High was badly damaged by the 1906 catastrophe, but Lowell survived, and was used as the San Francisco Police Department's temporary headquarters during the recovery and reconstruction period.

14. Goodyear Rubber Company: In 1906 the Goodyear Rubber Company occupied several buildings in San Francisco. Its main office was at 573-579 Market Street just five blocks from the Ferry Building. Subsidiary offices, warehouses, and factories were scattered throughout the "south of Market" neighborhood, and other parts of the city. One rubber factory was at 86-92 Stevenson, one short block south of Market, while another factory, specializing in rubberized, waterproof clothing, was located elsewhere.

15. Broken Water Mains: Gladys Hansen has studied the block-by-block progress of the fire, and the response to it, for half a century. She makes a convincing case that the "broken water main" problem was more perceived than real. Hansen believes that several reasons why normal fire-fighting procedures were ineffectual during the three days of the fires must be taken into account. First and foremost, was that the Fire Department was simply overwhelmed by the immensity of the disaster. In 1906, the San Francisco Fire Department numbered less than 600 men, divided into 9 battalions, organized around 38 pumping engines and 10 ladder companies. All were deployed immediately on the morning of April 18th, but there were simply too many fires burning in too many parts of the city for so small a force to control all of them. Secondly, many of the streets were so choked with rubble that fire equipment either could not get to still-functioning hydrants, or when
they could, many of these hydrants themselves were inaccessible, buried under fallen masonry. In any event, the decision to use dynamite once the hydrant and hose option became unfeasible was made on the first morning of the fires, and once made, was never reversed.

16. Mabel Burke was a tough customer, and nothing if not determined. Three years after the earthquake and fires, in 1909, she and Sergeant W.T. Dillon were a “courting couple.” They spent much of their time traveling between Sausalito and Fort Baker, singly or together. During one such trip “over the hill” to the military reservation Mabel, driving her one-horse buckboard, was accosted by a drunken soldier intent on no-frills romance. After horse-whipping him into unconsciousness, she got down, loaded his inert form into her buckboard, and drove him down to the Fort Baker parade ground, where she dumped him into the dirt directly in front of the guardhouse. Not coincidentally, her intended, W.T. Dillon, was serving as Sergeant of the Guard inside. We can assume that he also got his own licks in shortly afterward.

17. Stampede on Mission Street: Mabel Burke Dillon was an accomplished roconteur. Many years after 1906, she told her youngest son Richard about her ill-conceived attempt to go to San Francisco the morning of the earthquake, before the great fires had made much headway. Mabel Dillon always referred to the great “fire” of 1906, as did most of her contemporaries, never to the “earthquake and fire” (Dillon 1983: 119). The best previously-published eyewitness account of the “stampede” and how it was stopped was by San Francisco Police officer Harry F. Walsh himself (Walsh 1926, in Barker, 1998:97-99). A second eyewitness account, by letter carrier Roland M. Roche, is offered in Hansen and Condon (1989:53-54). The most recent retellings of the story are by Fradkin (2005: 56-57) and by Smith (2005:67).

18. Dynamiting Constant Over All Three Days of the Fires: Charles Keeler, a keen eyewitness, noted that “...the boom of the dynamiting sounded throughout the [first] night.” [of the fire, April 18-19] Keeler 1906: 19. Captain Le Vert Coleman, placed in titular charge of the demolition effort by both civil and military authorities, stated that his demolition work against the fire began at 9:00 A.M. on April 18th, and was concluded by 3 P.M. on the 21st. Others had begun blowing buildings before he arrived on the scene, and continued to do so long after his stated termination time. Captain Coleman subsequently dynamited the “standing walls” of burnt-out buildings after the fires were out, beginning at 7 A.M. on the 23rd of April. This “clean up” work continued for a solid week, until the 30th of the same month (Coleman 1906).

19. William Tarleton Dillon was born William Thomas Dervin. Dillon was his mother’s maiden name. After an irreparable break with his father, Dervin “laundered” his identity through various enlistments and re-enlistments, always under slightly different variants: "Tom Dillon" in San Francisco in 1898, "William Dillon" in South Africa in 1899, and finally, William Tarleton Dillon in Manila in 1900.

20. Mustang: The English word is a garbling of the Spanish Mesteño, meaning a wild horse tamed just enough to ride, as opposed to a pampered thoroughbred. The American military connotation of the slang term "Mustang" came to mean, by the 1920s, an officer who had come up the "hard way," i.e., began his career as an enlisted man, rather than as a product of a formal military education such as through the U.S. Army Military Academy at West Point.

21. Formation of the Coast Artillery, 1901: San Francisco Call, 1901. The Coast Artillery became one of Teddy Roosevelt's pet military projects soon after he became president, and this new branch of the service attracted the best and the brightest regular Army officers and enlisted men from the older parent organization, which now became known as the Field Artillery. An impartial evaluation of the different elements within the U.S. Army at the time of the 1906 Earthquake and Fires from the Inspector General's perspective noted that the coast artillery was consistently the most efficient arm, while the cavalry and infantry were improving only gradually. The field artillery, unfortunately, was dead last, characterized by a lack of proficiency (Whitehorne 1998: 58).

22. A Tall Man in a Short Man's Army: W.T. Dillon's height was recorded as six feet, one inch, on his 1916 Marin County Voter's Registration form. If he had come face-to-face with General Funston during the 1906 fight against the San Francisco fires, Sergeant Dillon, being nine inches taller, would have towered over his diminutive commander.

23. Battery Spencer, built in 1902 with Sergeant Dillon's help, was one of Teddy Roosevelt's most important "Big Sticks" on the Pacific Coast. It was the highest-elevation big-gun battery in the continental United States, and named for Major General Joseph Spencer of the Revolutionary War's Continental Army. Since 1937, Battery Spencer has been familiar to motorists heading north over the Golden Gate Bridge, as it perchès high and to the left of the North Tower. It remains the best place for tourists to obtain a spectacular view of the bridge below them and the city it leads to beyond.

24. Schmitz and Ruef, San Francisco's Top Crooks: In 1906 Schmitz and Ruef's coterie of
graft-grabbing cronies were popularly referred to as the "paint eaters." These officials, both elected and appointed, were said to have been greedy enough to eat the paint off a wall (Dillon, 1985: 162). Mayor Schmitz' San Francisco Police Department was definitely "on the take," with a great many officers getting a regular "blind man's bonus" (Dillon, 1962: 353) for looking the other way while laws were being broken. Schmitz' Fire Department, generally considered more honest that his police, developed public safety recommendations (like water main upgrades, greater numbers of fire-hydrants, etc.) that were simply ignored by the "paint eaters" since no profit could be turned from them. After the earthquake, a great many San Francisco policemen were indicted, the department was universally condemned as "rotten to the core," and completely rebuilt.


26. Earthquake and Fire Refugees in Marin County: The number of San Francisco earthquake refugees in southern Marin County, at first many thousands, had dwindled to only 500 by June 1906, mostly congregated near San Rafael. (Greely 1906:138).


30. U.S. Army Blamed for the Excesses of the National Guard: Greely 1906:97-98. General Greely, stung by many accusations against the U.S. Army, made it clear that most of the worst excesses against innocent civilians were committed by other organizations, both in and out of uniform. The remarkable coincidence (to General Greely's absence) that the commander of the California National Guard was absent in Ukiah the morning of the earthquake did nothing to improve command and control of his force back home in San Francisco. Even the most eloquent apologist for the Guard (Hudson 1976: 138) blandly states that most guard units acted independently (English translation: without orders) during the first 24 hours of the disaster. One high-ranking officer of the California National Guard even recommended that his own guardsmen, so prone to looting as to be a major problem, be disciplined by more reliable regular Army soldiers (Humphreys 1906).

31. And it Didn't Stop There: The six law enforcement organizations identified were not the only ones determined to police San Francisco during and after the disaster. The University of California Regiment of Cadets turned out in uniform and volunteered for service. A public-spirited group of Chicago Policemen, bringing their own guns with them, even turned up shortly after the fires were out, volunteering for duty patrolling the streets, but were turned around and sent back to Chicago by the SFPD.

32. Murderous Conduct of the California National Guard: Virtual Museum of the City of San Francisco 1906a; 1906b.

33. Two Looters Lynched by Civilian Mob: Morris 1906: 79.


35. San Francisco's Business District: then, as now, was centered on Montgomery Street, which most regular Army soldiers in 1906 referred to as "Monkey Street." Correspondingly, according to the men in uniform, the bankers who worked on Monkey Street in coats, high collars and ties, were said to wear "monkey suits."

36. U.S. Army Detachments Deployed on April 18th: Devol 1907.

37. The 61st C.A.C. and Sergeant Dillon Deployed on April 19th: Devol 1907.

38. Trigger-Happy National Guardsmen Confused with U.S. Army Regulars: Lotchin (2002: xix) and Barker (1998: 44) support our conclusion that the average earthquake victim in 1906 couldn't differentiate between National Guardsmen and U.S. Army Regulars. Certainly, some contemporary newspaper reporters hedged their bets and referred to single individuals alternatively as both regulars and national guardsmen, as if the two designations were interchangeable. (San Francisco Chronicle, 1906). The misidentification problem has continued up to the present day. For example, Bronson (1959) in his otherwise excellent treatment of the 1906 disaster, routinely confuses guardsmen with regulars in his figure captions. More recently Hudson (1976) identifies virtually all military men in his account of the fire-fighting effort, as well as in all of his illustrations, as Guardsmen. Reading his account, one would almost conclude that the regular Army was absent from San Francisco during the 1906 fires.

39. Bogus Artistic Rendering of San Francisco Firing Squads: The most lurid of these was a full-page, full-color rendering on the cover of the illustrated supplement to the French Le Petit Parisien for May 6, 1906 (Burkhart, 2005:74). It shows a line of soldiers mowing down four blindfolded men tied to stakes. This is a wonderfully inventive, completely fictional, graphic complement to some of the equally fictional literary excesses of similar vintage cranked out back in the United States. U.C. Berkeley professor Henry Morse Stephens (1908) in
a San Francisco Examiner article published on the second anniversary of the Earthquake cautioned: "The various stories of shooting by the soldiers and by civilians have grown in the imaginations of some legend makers out of a scant five or six into hundreds and thousands." Unfortunately, some modern writers have not heeded Professor Stephen's caution of more than a century ago. Kurzman (2002), for example, entitles one chapter of his sensationalistic, retro-muckraking book Criminals in Uniform. He leaves little doubt that he considers General Funston to have been the lead criminal: "According to one study, at least five hundred people were shot or bayonetted to death on the streets not only for looting but also for the slightest infraction of an order. The bodies of some were hurled into the fire or left for the rats. Often, many suspected looters were lined up and shot one at a time." (ibid: 129-130).


41. The "Bad Squad" of the 61st C.A.C. is Disciplined: Hansen and Condon 1989:75

42. Explosives Used in 1850 San Francisco Fire-Fighting: A San Francisco Chronicle May 3, 1950 article by Robert O'Brien entitled "A Second Gold Rush Inferno" relates how the city suffered through six great Gold Rush period fires, and, in fact, was famous throughout the world as "the city always ablaze." The use of very fine-grained, black blasting powder as a means of fighting fires is documented for the May, 1850, conflagration. This may have been the first time explosives were used to fight fires anywhere in the world outside of the battlefield.

43. Black Powder: continues to be an essential Chinese ceremonial component in the form of firecrackers. No New Year's celebration, traditional wedding or funeral is complete without firecrackers, nor has been for nearly two millennia. Traditional Chinese believe that you are not truly married unless you have firecrackers at your wedding. Consequently, the senior author's Chinese wedding reception in downtown Honolulu in 1981 incorporated firecrackers under special permit from the Fire Marshal.

44. Explosive Ignorance vs Knowledge: Modern writers evaluating the response to the 1906 San Francisco fires continue to demonstrate an incomprehensible ignorance about explosives. Dennis Smith (2005:45) for example, states that "dynamite" was used in a successful fire-fighting effort in New York City in 1835, fully thirty years before it was invented and became readily available anywhere in the world. Smith (ibid: 80-81) later in his opus also manages to confuse both "gunpowder" and "dynamite" with the guncotton in the Naval stores at Mare Island.

On the other hand, the senior author of the present text is no stranger to explosives. He began experimenting with combustibles more than 50 years ago when these were readily available through the mail, even to pre-teens. He was also very pleased to have been asked, during his Ph.D. Oral Examinations at U.C. Berkeley in 1977, to expound upon the historical development of Greek fire in contrast to gunpowder, which he did for approximately a half-hour, thereby forestalling more difficult questions. A third-generation handloader and a certified handloading instructor, he still retains reloading equipment made by his grandfather William T. Dillon around the time of the 1906 San Francisco Earthquake and Fires. This material, along with some very old powder, came to him courtesy of his hand-loading uncle Jack in a wooden Hercules Powder box of similar vintage.


47. Twin Dynamite Factories in Contra Costa County: Gudee and Bright 1998: 143; 164.


49. First Request for Explosives by the Fire Chief: Coleman 1906; Funston, in Greely 1906:93.


52. First Buildings Dynamited at the Insistence of the SFFD and Abe Ruef: Briggs 1906.

53. Fire Captain Schmidt Sends Firemen to Work with Briggs: Schmidt in Bowlen, 1906: 2d

54. All Available Stick Dynamite Immediately Expended: Briggs 1906.

55. U.S. Army Engineers Observe Dynamiting on the Afternoon of the 18th: Kelly 1906:2.


57. Colonel Morris works at the direction of Mayor Schmitz on the Fire Line: Morris 1906.

58. Captain Coleman Hauls Dynamite to the Fire Line: Coleman 1906.
60. Mayor Schmitz Overrules the Military: Coleman 1906.
61. John Berringham too Drunk to be of Assistance to Coleman: Coleman 1906.
64. Lieutenant Briggs turns over Leadership of his Squad to Coleman: Briggs 1906.
65. U.S. Cavalry Clears Market Street for Dynamiting: Keeler 1906: 14. One of the best earthquake and fire stories of 1906 concerns Sam Barrett, who was awarded the first Ph.D. in anthropology by the University of California that same year. Barrett's sole copy of his doctoral dissertation was lying atop Professor A.L. Kroeber's desk in the California Academy of Sciences building on Market Street between 4th and 5th streets on the morning of April 18, 1906. Barrett managed to dodge falling cornices, flames, and both regulars and guardsmen with "shoot to kill" orders, entered the burning building, and reclaimed his manuscript. The Academy of Sciences building, after dynamiting, was a total loss (Moratto 1976: 5), but Barrett was nevertheless able to deliver his dissertation to Kroeber a second time, after the fires were out. See also Bronson, 1959: 49, for another account of a scientist (Alice Eastwood) attempting to save specimens from the same doomed building.
68. Automobiles Used as Dynamite Haulers: Keeler 1906: 15.
70. Schmitz Brings in Giant Powder Without Military Authorization: Kelly 1906: 3-4.
71. Corps of Engineers Dynamite Squad at Fort Mason not Deployed: Kelly 1906: 4-5.
75. Unidentified Regular Army Enlisted Men Fighting the Fire: Only three regular Army enlisted men are mentioned by name in Captain Coleman's official report: John L. Davis, Master Electrician, Field Artillery; Sergeant Winfield Scott Williams, Electrician, Field Artillery; and Corporal John E. McSweeney, 66th Company, Coast Artillery. Possibly, these three men were specifically mentioned because of their proximity to Mayor Schmitz, Abe Ruef, and Chiefs Dougherty and Dinan during the early hours of the fire. Later, almost as an afterthought, Coleman mentions three more members of his squad, none of whom worked for the full three days of the fire: George F. Ryan, a civilian employee of the Presidio Quartermaster's Department, Electrician Sergeant Jenkins, Field Artillery, and a Mr. Carson, a civilian employee of the Army Engineers. But three or even six men are far fewer than those represented in the photos accompanying this report (Figure 9, for example, shows nine soldiers, including a Sergeant) depicting a dynamite squad in action. Dozens more regular Army enlisted men worked just as hard, anonymously, on other demolition squads, as the three mentioned. One of these unsung dynamiters was Sergeant William T. Dillon of the 61st Coast Artillery Company: we will most likely never know how many others there were.

References will be cited at end of Part 2.
Dynamiting San Francisco in 1906, Part Two

IN THIS ISSUE:  
- Sergeant Dillon With the Dynamite Squads: 1906, Part 2
- The Indigenous Peoples of California
- California: It's Gold and It's Inhabitants
Sergeant Dillon With the Dynamite Squads: 1906

By Brian Dervin Dillon, Richard H. Dillon and John Dervin Yi An Dillon

Part One of "Sergeant Dillon With the Dynamite Squads: 1906" appeared in CTQ#91, Fall 2012.

Part Two

U.S. NAVY DEMOLITION SQUADS

Contemporary accounts of dynamite squads working independently of Captain Coleman's U.S. Army units are plentiful. At least two separate U.S. Navy dynamite squads were active in completely different parts of the city, on two different days.

One of the most fascinating first-hand accounts of the fire-fighting effort is that written by Navy Lieutenant Frederick N. Freeman, in his report to the Commander-In-Chief of the Pacific Squadron. Freeman came rushing down to San Francisco from Mare Island at the helm of a destroyer under a full head of steam, arriving at the foot of Howard Street one block east of Mission about 10:30 in the morning of the 18th. He later moved his vessel, which was acting as a fire boat and pumping water down hose lines manned by the San Francisco Fire Department, farther east, to the basin near Townsend Street. Here he was instrumental in saving the Southern Pacific freight depot to the immediate south.

Lieutenant Freeman, at the head of the first U.S. Navy dynamite squad, began blowing up buildings on the second night of the fire, north of where Briggs and Coleman had been dynamiting the previous day:

"At this period of the fire [10 P.M. on the night of the 19th] I received two wagon loads of dynamite, and after consultation with a fire department official, Captain Cook, of the 10th Battalion, dynamited four houses in this neighborhood [Broadway and Montgomery], but without doing any good as the fire was now devastating everything [within] its reach, advancing from the Westward over Telegraph Hill and sweeping the wooden buildings on the eminence at the rate of a block every half hour."

What Lieutenant Freeman left unsaid in his account was that Abe Ruef himself delivered the dynamite to him, a point clearly made twenty years later in a retrospective account by Edward M. Lind:

"A number of marines under Naval Lieutenant Frederick N. Freeman were working heroically on some buildings on Montgomery Avenue [now Columbus Street], above Broadway, and were using dynamite to make a firebreak. The dynamite had been brought to that locality by Mr. Abe Ruef, the political boss of that period, who had, and still has, important property interests in that part of the city."

A second encounter with Ruef was likewise omitted from Lieutenant Freeman's report, but noted in a retrospective account by Mother Superior Mary Josephine Hagarty, of one of San Francisco's many Catholic orders:

"...Abraham Ruef was on Stockton Street at the bay with a fire hose, and... said he would save North Beach. Mr. Ruef had taken the hose from one of the fire department hosecarts, much to the outrage of the firefighters. Lieutenant Freeman subsequently held the political boss of San Francisco at gunpoint and took the hose away from him."

On the second night and third and final day of the fire, a second U.S. Navy demolition squad, unmentioned by Lieutenant Freeman because it was not working under his authority, was blowing up buildings far to the west, on Van Ness Avenue. This second U.S. Navy dynamite squad was a small, three-man unit composed of personnel from Mare
Island, with a naval gunner laying most of the charges of guncotton, not dynamite. It was one of the very few other dynamite squads mentioned in Captain Le Vert Coleman's report, mainly because it was working under his orders:

"Naval gunner Hull [?]; another naval gunner name unknown, and an Ensign, name unknown joined us for a little while at Franklin Street. Hull assisted us for a little while but soon left, the others did not engage with us in the work inside the buildings."79

The contemporary press, however, seized upon the idea of the three heroic sailors, and magnified their contribution all out of proportion. Charles Morris, copying down the gushy newspaper accounts almost verbatim, then rushing his wildly inaccurate book into print, contributed to the myth:

"Three men saved San Francisco, so far as any San Francisco existed after the fire had worked its will, these three constituting the dynamite squad who faced the demon at Van Ness Avenue.

...Admiral McCalla sent a trio of his most trusted men from Mare Island with orders to check the conflagration at any cost of property. With them they brought a ton and a half of guncotton. The terrific power of the explosive was equal to the maniac determination of the fire. Captain MacBride was in charge of the squad, Chief Gunner Adamson placed the charges and the third gunner set them off.

Stationing themselves on Van Ness Avenue...they went systematically to work, and when they had ended a broad open space, occupied only by the dismantled ruins of buildings, remained of what had been a long row of handsome and costly residences...

...The whole east side of Van Ness Avenue, from the Golden Gate to Greenwich, a distance of twenty-two blocks, or a mile and a half, was dynamited a block deep, though most of the structures as yet had stood untouched by spark or cinder. Not one charge failed. Not one building stood upon its foundation..."

...Three men did this, and when their work was over and what stood of the city rested quietly for the first time, they departed as modestly as they had come. They were ordered to save San Francisco, and they obeyed orders, and Captain MacBride and his two gunners made history on that dreadful night."80

Morris' plagiarized account was hurled into print so fast that he never bothered to find out the name of the third Navy man, who was probably the "Hull" identified by Captain Coleman. If this small Navy demolition team was even a tenth part as successful as the press reports and Morris would have it, then this was in large measure because the Army was keeping the rightful owners of the buildings being demolished at arm's length. Finally, any objective consideration of time and distance renders the suggestion that just three men could blow up hundreds of buildings over a 22-block area ludicrous. We know that multiple Army dynamite squads were also working alongside the three Navy men on Van Ness Avenue on the final day and night of the fire, and dozens of men from the U.S. Army deserved every bit as much credit as did Morris' two named and one unnamed Navy man from Mare Island.

Meanwhile, in much less turgid language than Morris', Lieutenant Freeman also took pains to praise the work of one of the Marines attached to his naval forces in specific regard to dynamiting:

"Another enlisted man, Private William P. Burton, U.S.M.C., of the Mare Island Guard, did splendid work with my forces by his skill in using dynamite. He was cool and collected and possessed of great bravery, and I recommend that he be commended for his zeal and skill."81

Unfortunately, it is unclear from Freeman's report whether W. P. Burton, USMC, worked only as a member of Freeman's own short-term dynamite squad on April 19th, or attached himself to some other dynamite squad for different and potentially longer periods, or both.

CALIFORNIA NATIONAL GUARD DEMOLITION SQUADS

At least two and possibly three California
National Guard dynamite squads were active, the first as early as the morning of April 18th, and again on April 19th simultaneously with the second, at opposite ends of the fire. The third squad was never deployed because its wagonload of dynamite was hijacked from the fire line before the explosives could be distributed.

"...the First Battalion of the [California National Guard] coast artillery (part of the Second Brigade) . assembled without orders early on the morning of April 18... at the rear of their partially destroyed armory. At the same time a detachment was sent to aid the fire department in dynamiting buildings along Clay and Mason streets."  

This first National Guard Demolition team was therefore working to the west of Lieutenant Briggs in the city's business district, and may also have been responsible for bleeding away some of the dynamite whose lack forced him to use black powder under protest instead.

Possibly as early as the final hours of the 18th, but certainly by the wee hours of the 19th, a second California National Guard dynamite squad was at work, far to the south in the Mission District, as reported by Captain James Radford, of San Francisco Fire Department Engine 25:

"At 12:30 A.M. April 19th, we received word that there was water at Fourteenth and Folsom Sts., but were unable to take that corner at once, on account of the dynamiting which was then going on in that vicinity, under command of Colonel Walter Kelly, First Regiment National Guard California."  

The more effective of these two National Guard dynamite squads was successful, most probably, because of the participation of techno-savvy submariners from Mare Island. Lieutenant Freeman of the U.S. Navy, meticulous note-taker that he was, commented:

"Many [U.S. Navy] men not mentioned here worked with me for a time and then took up some special duty when they were not able to find me to report to. Among the men so employed, the crews of the submarine boats at Mare Island Navy Yard were conspicuous. One of these, J. Curtin, Chief Electrician from the Pike, worked with me one day then while on patrol, was taken up by the First Regiment of California National Guards [sic] to do dynamiting for them. He and several others of the Pike's crew successfully dynamited many buildings under the direction of the militia officials in the Mission [District]."  

Curtin and his fellow pigboaters undoubtedly set most of the explosives for the guardsmen, who probably worked mainly to keep the sailors supplied with dynamite, and no doubt also took sole responsibility for crowd control. This second California National Guard dynamite squad was also mentioned in the reports of San Francisco Fire Department officials collected shortly after it was activated, wherein a number of both civilian and Navy members of the squad, called as witnesses, testified that the "dynamiting crew" was operating under the command of Lieutenant William H. Talbot, 1st Infantry, National Guard of California. They dynamited the east side of Dolores Street, between 15th and 16th streets in the Mission District.

A third California National Guard Dynamite Squad appears to have been formed, or at least was standing to on the night of April 20th, for the final assault on the fire along Van Ness Avenue. This third dynamite squad was apparently under the direct authority of Brigadier General John Koster, the commander of all guard forces in San Francisco during the three-day emergency, who complained that:

"...much opposition to the [California National Guard's] plan of action was interposed by the chiefs of the police and Fire departments..."

When ready to proceed with the work of dynamiting, the wagon containing the explosive had been removed from the position assigned to it by me, and could not again be located. It is presumed that, being a portion of the equipment of the Fire Department, the same was withdrawn by direction of the chief of this department in order to prevent the carrying out of the Mayor's orders."
Figure 14: A demolition squad reputed by Hudson (1976) to have been composed entirely of National Guardsmen. But, note the San Francisco Police Sergeant at right, who may be J.H. Morrissey, and the mixture of uniforms typical of different Army units. The ten men were probably at work in late April or early May, 1906, long after the fires had been put out. The spires in the right background may belong to the Lutheran Church on the corner of Jefferson Square near Gough and Eddy streets; if so, the view may be to the west, from somewhere near Larkin and Golden Gate. The Jefferson Square area was in the hands of the regular Army, then of Guardsmen, some of whom were under regular Army command. Consequently, specific identification of this squad remains problematic. From a stereo pair by Underwood and Underwood, 1906. Originally captioned: "#8208, The dynamite crew-destroying unsafe walls left standing by the earthquake—San Francisco, Cal." Courtesy of the Bancroft Library, University of California, Berkeley.
Somebody, either a San Francisco Policeman, Fireman, or regular Army soldier, possibly a combination of all three, or perhaps even angry property owners who did not want their buildings demolished, hijacked the National Guard’s supply of dynamite. Unless a civilian had taken the wagonload of dynamite, it had probably been high-graded so that other dynamite squads could supplement their own dwindling supplies of explosives. In either event, it served to keep yet one more group of potentially dangerous and untrained dynamiters out of the already very confused ongoing demolition efforts. With benefit of hindsight, we conclude that if the California National Guard could not even “guard” its own supply of dynamite, it was probably a very good thing that it was prevented from deploying an all-CNG dynamite squad on the final night of the fire.

SAN FRANCISCO FIRE DEPARTMENT DEMOLITION SQUADS

No fewer than four separate San Francisco Fire Department dynamite squads were operating on the first two days of the fire, completely independent of Captain Coleman, and usually without any military participation or direction. Captain William Carew of the San Francisco Fire Department’s Truck Company 7, stationed at 3050 17th Street near the southernmost limit of the fire, wrote a very brief report, only a fragment of which remains. Captain Carew and his men fought a number of fires in his vicinity, and responded to the pancaked Valencia Hotel a short distance away. He then was ordered to move on to the intersection of Hayes and Gough streets, near the southeastern extent of the fire.

Truck Company 7 was:

“. . . making very little headway owing to the scarcity of water; the fire was spreading rapidly in all directions and in a last effort to check the spreading of the flames, dynamite was used.

By order of [Fire] Chief Shaughnessy, and under the direction of some official from the powder works, considerable dynamiting was done in the vicinity of Franklin and Van Ness Ave., on Hayes St. They also used dynamite in the neighborhood of 11th and Mission streets. By the time [of] the use of this explosive a number of buildings were raised [sic] to the ground, but as we were under the leadership of a competent person (one who was used to the handling of high grade explosives) very little damage was done to the properties which joined those we dynamited. This dynamiting occurred on Wednesday P.M. April 18th.”

Captain Carew was not the only high-ranking officer of the San Francisco Fire Department who led a dynamite squad on the first day of the fire without any connection of any kind to the military. A second ad hoc San Francisco Fire Department demolition team was also formed by Battalion Chief John J. Conlon, using the personnel of Engine Company No. 30:

“. . . I ordered Engine No. 30 to report immediately at Eighth and Market streets . . . and was then informed by [Fire] Lieutenant Edward Kehoe of Truck [Company] No. 3 that there was no water to be had in this district.

A foreman, employed at the Railway Tunnels at Baden [present-day South San Francisco] reported to me that he had a wagon-load of dynamite, and offering his services, we proceeded to dynamite all the buildings on the East side of Eighth Street, from Market to Folsom streets, instructing in the meantime a wagon be sent to Baden for more explosives.

My experience with dynamite did not prove entirely satisfactory, due to the fact that up to this time I had never been called upon to use high-grade explosives; therefore I relied upon the foreman who represented himself as having had experience in this line, to do the necessary dynamiting. I recall in one instance, that after dynamiting the two frame buildings facing Eighth Street, next to the northeast corner of Harrison Street, we placed a case of dynamite on the east side of each floor, of the three-story frame building situated on the northeast corner of Eighth and Harrison streets, and attempted to fall this frame house into the premises previously dynamited; we failed in this however, as the building
was blown in the opposite direction into the street.\textsuperscript{99}

Conlon and his firemen fought various fires at the southern and southeastern margins of the blaze all day long, getting pushed back again and again as the water supply gave out or the flames became too intense:

"Realizing that it was practically impossible to...check the fire in this vicinity [near 8th and Harrison] I ordered the Captains [of Engines 5, 16 and 29] to move their Engines to Sixth Street. In the meantime I assisted the dynamiting crew then destroying the buildings on the north side of Harrison Street, between Seventh and Eighth, this attempt was to save the Children's Playground, but once again proved unavailing.\textsuperscript{990}

Conlon’s firemen used dynamite or water, whichever was available, to fight the fire through the entire first day of the catastrophe, and it was Conlon who obtained water from Navy Lieutenant Freeman on the first night of the fire.

Yet a third dynamite squad led by San Francisco City firemen was active on the afternoon of the 18th. Captain T. J. Murphy’s Engine No. 29’s station was at 11th and Bryant streets, where the “south of the slot” area abutted the northern end of the Mission District:

"In the afternoon [of April 18th] we met Civilians hauling boxes of dynamite and also fuses and caps in a buggy, and with this we attempted to check the progress of the fire by dynamiting both sides of Langton St., between Folsom and Harrison sts. This also was unsuccessful, as we had no water to extinguish the flames which originated after dynamiting.\textsuperscript{991}

From the above reports, it is clear that the San Francisco Fire Department, in at least two circumstances, actually did what the U.S. Army was later accused of: starting fires with the explosives they were using in order to stop them.

Not only did the San Francisco Fire Department commit errors with explosives that would later be blamed on the U.S. Army, but rumors of bribery-induced favoritism also surfaced which tarnished the Fire Department’s otherwise squeaky-clean image:

"...the Monkey Block [Montgomery Block building on Montgomery, now Columbus Street]. ...was saved by benign bribery, according to some accounts. It was scheduled for dynamiting, but someone with a vested interest in the old building was said to have pressed currency into the smoke- grimed hand of an SFFD battalion chief, and the structure was spared.\textsuperscript{992}

\addcontentsline{toc}{section}{CIVILIAN DEMOLITION SQUADS}

Finally, two or possibly even three separate civilian dynamite squads were in operation. Being turned away by Captain Le Vert Coleman on the morning of the 18th, unfortunately, did not stop John Birmingham. The inebriated superintendent of the California Powder Works, who may have been more of an accountant than an experienced dynamiter himself, created his own dynamite squad later that same day in response to Abe Ruef’s orders. The drunken and dangerous Birmingham and his men began blowing up buildings in the Stockton/Broadway part of downtown. By some accounts this civilian demolition squad failed to put out a single fire, and instead started a great many conflagrations that otherwise would not have been started.

"Witness [San Francisco Fire] Captain H. Schmidt states that the portion of the attached [San Francisco Fire Department Dynamite] map shaded RED [buildings on the south side of Broadway, near Powell and Stockton Streets] was dynamited on April 19th, in the afternoon, by an unorganized crew, consisting of Civilians, Firemen and under the Supervision of J. Birmingham [sic] of the California Powder Works.\textsuperscript{993}

Schmidt noted that buildings on three of the four corners on Stockton and Broadway caught fire from Birmingham’s inept use of dynamite on the 19th. It would seem from some of the contemporary San Francisco Fire Department reports that not only
was Abe Ruef bossing the Fire Department around at whim, but that the drunken John Bermingham had been deputized to run what amounted to Boss Ruef's own personal dynamite squad:

"After a short time [after 2 A.M. on the morning of April 19th] we [San Francisco Fire Captain Schmidt and Engine #28] received orders from A. Ruef to go to the cistern at Pacific and Kearny sts... About 7 A.M. Thursday April 19th A. Ruef returned and ordered all hose taken off the wagon but one tier, with a detail of two men he sent the wagon to the Lombard St. wharf to report to J. Birmingham [sic] of the Cal.[ifornia] Powder works. The men detailed to haul this powder were acting Lieat. J. McGowan and Hoseman A. Bernstein [two of the three firemen sent to work with U.S. Artillery Lieutenant Briggs the previous day, who had obviously returned by this time] and they were on duty until about 9 p.m....

...We stopped the fire from crossing to the North side of Broadway, but after J. Birmingham [sic] had dynamited the S.W. cor [ner] of Broadway and Stockton sts., the fire crossed to the East side of Stockton St., and the North side of Broadway. We left this vicinity about 9 p.m. April 19th."94

The second all-civilian dynamite squad was composed of high-society types who blew up exactly one building before getting cold feet and returning to less dangerous demolition methods in their own neighborhood:

"Rather early Friday morning [April 20th], the fire which was moving steadily from south to north along Leavenworth Street and along Jones Street attacked the southernmost line of houses in the block in question. The residents of the houses [were]... determined at least to make fight for their homes. Prominent among these men was Dr. J.K. Plincz, a young surgeon, and Mr. Kirk Harris, formerly of the staff of the San Francisco Chronicle. These two men with a few others, some passers-by, and two or three carmen from the Union Street Car-house, set to work. They chopped and broke down fences and small outbuildings...[and] they achieved the successful destruction by dynamite of a small barn. "95

And finally, a cryptic comment by San Francisco Fire Captain S. D. Russell of Engine 27, suggests the existence of yet a third civilian dynamite squad operating as early as the first afternoon of the fire:

"Our company next located at the corner of Eddy and Market sts [sic]. While fighting the fire in this district, the U.S. soldiers rendered us great assistance, and were instrumental in saving our apparatus at times. [Russell's Engine 27 then moved to]...the nearest hydrant of service...at Eddy and Franklin sts [sic]. The engine was connected at this point, and with the aid of engine 15 we doubled up [both fire engines pumping into a single hose], using a hose seven hundred feet long reaching to Grove and Franklin sts.[sic], we were forced to abandon this position, however, owing to rapid progress of the fire, and the civil authorities who were dynamiting in this district.96

Russell clearly identified these dynamiters as civilians, not military, having taken pains to both specifically identify and to praise regular Army soldiers earlier in his account. These mysterious dynamiters already at work on the afternoon of April 18th west of Van Ness Avenue where the Army would make its stand two days later, may have been Bermingham's group, now divested of its two San Francisco firemen, moving on after their disastrous work in the business district earlier in the day.

More than a week after the fires were out, other civilian dynamite squads were still roaming the city, blowing down standing walls without any authorization from the civil or military authorities. The problem was so acute that Mayor Schmitz had to issue yet another proclamation to halt the practice:

"Fort Mason, April 28, 1906. To the Citizens of San Francisco.

Many complaints have come to
this office that private parties are using dynamite in order to destroy the standing walls which are dangerous. The public is hereby notified that no dynamiting will be allowed unless done through the proper authorities, under the supervision of Supervisor Duffy and the firing squad detailed by the Federal authorities for that duty.¹⁹⁷

**MYTH 1: ONE DYNAMITE “BRIGADE” OR MANY SQUADS?**

Some 1906 California newspapers used the terms “Dynamite Brigade” interchangeably with “Dynamite Squad,” as if all the dynamiting during the San Francisco fire-fighting effort was done by a single, unified military organization.⁹⁸ Others referred to the demolition as having been performed by “General Funston’s Dynamite Corps.”⁹⁹ Neither term is correct; both simply indicate a basic unfamiliarity with military organizational terminology. There was no single dynamite “corps” or “brigade” with thousands of demolition men swarming over the city as they reduced it to rubble. Instead, there were many small squads of hand-picked experts and/or volunteers that worked independently of each other, only infrequently under centralized control, over the three days of the fires. We have been able to identify fifteen or sixteen such squads, a large number of which were never deployed. Other squads that we have yet to find documentation for probably also were active. The total number of dynamizers, not including others engaged in crowd control, was most likely more than a hundred men at any given time over the three long days of the fires.

An uncritical reading of the official reports by General Greeley, his subordinate, Brigadier Funston, and the Presidio’s Ordnance Officer, Captain Coleman, leads one to the inevitable conclusion that only one “dynamite squad” of just five men, led by Captain Le Vert Coleman himself, did all of the dynamiting over the three days of the fire-fighting effort. Similarly, an uninformed or naive reader of Morris’ 1906 sensationalistic bestseller could not help but conclude that three Navy demolition men saved San Francisco by themselves. These two conclusions not only contradict each other, but the historical evidence that both are equally incorrect is abundant and overwhelming.

There is no possible way that a single team of three, or even of five, demolitions men could have blown up the many hundreds of buildings that were demolished over the three days that the dynamite squads were active in San Francisco, even if they worked non-stop for all three days. Five men could not have had enough time to force their way into that many partially fallen, rubble-choked buildings, much less safely set charges in them, wire them up or set fuses, safely withdraw, and then wait for them to blow before moving on to the next building. Even under the most rushed of emergency conditions, it would have taken at least a half-hour to carry explosives into the ground floor or the basement of each building selected for demolition, to wire them to pillars or columns, or to pack them against foundations, then to either wire them up or fuse them up, and finally to withdraw to a safe distance. From a strictly objective standpoint, it seems obvious that there were many fewer such half-hour segments available over the three days of the fire than buildings blown. Multiple demolition squads, consequently, had to have been at work.

The brief review of Army, Navy, National Guard, San Francisco Fire Department, and even civilian, Dynamite Squads just concluded proves beyond any doubt that the number of demolition squads active in the fire-fighting effort was much greater than generally appreciated. It also reveals that dynamite squads were working all over the city in different areas, without any centralized control, until the very end of the effort, when most converged on Van Ness Avenue for the final stand against the westward moving fire. Table 1 is our initial effort to summarize the identifications, times and locations of operation, and citations for the dynamite squads at work during the San Francisco firestorms of 1906. Table 1 is neither complete nor all-inclusive; we hope that others pursue this fascinating research topic and expand our preliminary inventory.

Only two U.S. Army officers (Coleman and Briggs) have received the lion’s share of the credit and, conversely, the blame, for the work of the dynamite squads. Both were directly involved in demolition for all three days of the fire, yet neither was present nor involved in all of the dynamiting going on all over the city from April 18th through the 20th. Nor were both present full-time even while their own squad was at work. Officers commandeering, then riding, in automobiles to and from supplies of dynamite away from the fire
### Table 1:
**San Francisco Dynamite Squads, April 18-20, 1906**

<table>
<thead>
<tr>
<th>Squad</th>
<th>Personnel</th>
<th>Active</th>
<th>Where</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regular Army Squads</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Squad 1</strong>&lt;br&gt;U.S. Army Field/Coast Artillery</td>
<td>Capt. Le Vert Coleman&lt;br&gt;Lt. Raymond Briggs&lt;br&gt;J.L. Davis, FA&lt;br&gt;Sgt. Williams, FA&lt;br&gt;Cpl. McSweeney, CA&lt;br&gt;Sgt. Jenkins, FA&lt;br&gt;G.F. Ryan, civilian&lt;br&gt;Mr. Carson, civilian</td>
<td>4/18/06 9 A.M through 4/20/06 3 P.M.</td>
<td>1) Business District; 2) Nob Hill; 3) Van Ness Ave.</td>
<td>Briggs 1906; Coleman 1906; Greely 1906</td>
</tr>
<tr>
<td><strong>Squad 2</strong>&lt;br&gt;24th Company Field Artillery/SF Police Department</td>
<td>Lt. Charles O. Pulls&lt;br&gt;Capt. Gleeson SFPD&lt;br&gt;Sgt. Lainsbury, SFPD&lt;br&gt;Unnamed enlisted men</td>
<td>4/18/06 P.M.</td>
<td>6th &amp; Jesse Streets</td>
<td>Call=Chronicle=Examiner 1906 Morris 1906: 59; Lainsbury 1927; Fradkin 2005: 74-75</td>
</tr>
<tr>
<td><strong>Squad 3</strong>&lt;br&gt;61st Company Coast Artillery</td>
<td>Sgt. William T. Dillon&lt;br&gt;Unnamed 61st C.A.C. enlisted men</td>
<td>4/19/06 P.M. through 4/20/06</td>
<td>Van Ness Avenue</td>
<td>This paper; W.T. Dillon to Jack Dillon, 1928</td>
</tr>
<tr>
<td><strong>Squad 4</strong>&lt;br&gt;U.S. Army Engineers</td>
<td>Capt. Kelly&lt;br&gt;Lt. Barber&lt;br&gt;2 Non-coms, C Co.&lt;br&gt;8 Privates, C Co.</td>
<td>4/19/06 P.M. 4/20/06 A.M.</td>
<td>Fort Mason In Reserve, Not Deployed</td>
<td>Kelly 1906.</td>
</tr>
<tr>
<td><strong>Squad 5</strong>&lt;br&gt;U.S. Navy/USM.C. /U.S. Army/S.F. Fire Department</td>
<td>Lt. Freeman, USN&lt;br&gt;Capt. Cook, SFPD&lt;br&gt;Capt. Berry, 22nd Inf&lt;br&gt;Enlisted Men 22nd Inf&lt;br&gt;Sailors from Mare Is.&lt;br&gt;W. P. Burton, USMC</td>
<td>4/19/06 P.M.</td>
<td>Broadway near Montgomery</td>
<td>Freeman 1906.</td>
</tr>
<tr>
<td><strong>Squad 6</strong>&lt;br&gt;U.S. Navy</td>
<td>Capt. MacBride&lt;br&gt;Ch. Gunner Adamson&lt;br&gt;Gunner Hull (?)</td>
<td>4/19/06 P.M. through 4/20/06</td>
<td>Van Ness Avenue</td>
<td>Amador Ledger 1906; Coleman 1906; Morris 1906: 62-64.</td>
</tr>
<tr>
<td><strong>California National Guard Squads</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Squad 7</strong>&lt;br&gt;California National Guard, 1st Batt. C.A.</td>
<td>Lt. O'Hara&lt;br&gt;Enlisted men from 1st Battalion, CNG Coast Artillery</td>
<td>1) 4/18/06 A.M. 2) 4/19/06 P.M.</td>
<td>1) Clay &amp; Mason 2) Jefferson Square</td>
<td>S.F. Call 1906c; Hudson 1976: 138</td>
</tr>
<tr>
<td><strong>Squad 8</strong>&lt;br&gt;California National Guard, 1st Infantry/U.S. Navy</td>
<td>Col. Kelly, 1st Inf. CNG&lt;br&gt;Lt. Talbot, 1st Inf. CNG&lt;br&gt;Enlisted Men CNG&lt;br&gt;J. Curtis, A.M. Rice &amp; F.J. Campbell USN&lt;br&gt;S. Hall, Civilian</td>
<td>4/19/06 A.M.</td>
<td>1) Mission, 15th to 16th; 2) Dolores, 5th to 16th; 3) 14th &amp; Folsom</td>
<td>Bowlen 1906; Conlon 1906; Freeman 1906; Radford 1906; Hansen &amp; Condon 1989</td>
</tr>
<tr>
<td><strong>Squad 9</strong>&lt;br&gt;California National Guard</td>
<td>Brig. Gen John Koster&lt;br&gt;Unnamed CNG Troops</td>
<td>4/20/06 P.M.</td>
<td>Van Ness Avenue, Not Deployed</td>
<td>Koster 1906</td>
</tr>
</tbody>
</table>
# Table 1: San Francisco Dynamite Squads, April 18-20, 1906

<table>
<thead>
<tr>
<th>Squad</th>
<th>Personnel</th>
<th>Active:</th>
<th>Where:</th>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>San Francisco Fire Department Squads</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squad 10</td>
<td>S.F. Fire Department</td>
<td>Unnamed Fire Captain with Firemen</td>
<td>9 A.M. 4/18/06</td>
<td>Montgomery Street</td>
</tr>
<tr>
<td>Squad 11</td>
<td>S.F. Fire Department, Truck Co. 7</td>
<td>Capt. Carew Truck 7 Fire Crew Unnamed Official from “the Powder Works”</td>
<td>4/18/06 P.M.</td>
<td>1) Hayes St. near Franklin &amp; Van Ness 2) Mission near 11th</td>
</tr>
<tr>
<td>Squad 12</td>
<td>S.F. Fire Department, Engine No. 30</td>
<td>Batt. Ch. Conlon Engine 30 Fire Crew Unnamed Railroad Man</td>
<td>4/18/06 A.M. and P.M.</td>
<td>1) 8th Street, Market to Folsom 2) Harrison, 7th to 8th</td>
</tr>
<tr>
<td>Squad 13</td>
<td>S.F. Fire Dept. Engine No. 29</td>
<td>Capt. Murphy Engine 29 Fire Crew</td>
<td>4/18/06 P.M.</td>
<td>Langton St., Folsom to Harrison</td>
</tr>
</tbody>
</table>

| Civilian Squads | | | | |
|-----------------|-----------------|-----------------|-----------------|
| Squad 15 | Civilians/ Car House Employees | Dr. J. Plincz K. Harris 2-3 Union Street Car House Employees Unnamed “passers-by” | 4/20/06 A.M. | Leavenworth & Jones near Union | Lafler 1906: 5. |
| Squad 16 | Civilians | Unspecified “Civil Authorities” | 4/18/06 P.M. | Grove & Franklin | Russell 1906 |

Line, obviously could not also be placing charges themselves every time, or even much of the time. Yet another fact, unreported in both the Coleman and Briggs reports, is that for long periods of time, at least one of the two officers supposedly running the single dynamite squad at work in San Francisco was not even present within that city. Navy Lieutenant Freeman noted that:

“Earlier in the day [April 19th], by order of General Funston, the tug Priscilla was seized and given over to First Lieutenant Briggs, U.S.A., who took her to Pinole Point for dynamite. At this time this was the only tug available in my vicinity [the Embarcadero near Powell Street], and General Funston’s orders were to seize any ship on the water front that was to be used, and the master of the Priscilla worked in complete harmony with the officers of the Service during my period of duty.”

A round-trip to Pinole Point for dynamite in a tugboat could have caused as many as five hours of absence from the fire line. The demands of dynamiting on the second day of the fire led the U.S. Navy to work on dry land while the U.S. Army was afloat.

A logical assumption is that with the arrival
of experienced non-commissioned officers like Sergeant Dillon on the morning of the 19th to take over from Lieutenant Briggs, Captain Coleman would have been comfortable releasing the Lieutenant from the fire line so as to assure the supply of explosives for the final assault against the fires already in the planning stages. With the officers either away, running dynamite to the fire lines by automobile or by boat, or increasingly entangled in bureaucratic red tape and deflecting the complaints and obstructions of property owners, the actual dynamiting from the second day onwards must have been done by trusted, knowledgeable and experienced non-cons like Sergeant Dillon. If the enlisted men did the work but got no credit nor recognition for it, then the flipside of the same coin was that after the fire it was the duty of their commanding officer, Captain Coleman, to “take the heat” for the actions of all of the men under his direction.

**MYTH 2: FAST AND LOOSE OR SLOW AND STEADY?**

The second myth, that the U.S. Army engaged in an orgy of wanton destruction with dynamite in San Francisco, is of course tied to the equally unfounded myth that soldiers habitually shot down innocent people in the streets and committed all kinds of mayhem under the protection of federal authority. After all, why would homicidal, and out-of-control, soldiers hesitate to blow up millionaire’s mansions just for fun if they were already committing mass murder by firing squad just as if they were back in the Philippines?

As demonstrated earlier in this paper, most of the “trigger happy” incidents reported by the press in April, 1906 cannot be laid at the feet of the regular Army, but were the work of the California National Guard, or of Mayor Schmitz’ own “citizen’s guard.” The U.S. Army dynamite squads from start

---

Figure 15: U.S. Model 1897 3.2 inch field gun (right) with attached ammunition limber in use by the 61st Coast Artillery Company from Fort Baker, at Calexico, California. Such limbers, detached from their cannon, were used to move explosives around San Francisco during the 1906 fire, but the cannons themselves were never used. Caissons, or large limbers without the provision for cannon attachment, were likewise employed. Eight years later, First Sergeant Dillon and his elite unit was sent to the Mexican Border (marked by the fence in the background) as a response to revolutionary turmoil south of “the line.” Partial enlargement of panoramic shot by G. R. Nock, late April or early May, 1914. Dillon Collection.
to finish were under civil authority, first, that of Mayor Schmitz, and finally that of the Acting San Francisco Fire Chiefs, who in the ultimate assessment, spoke for the Mayor.

The final crescendo of dynamiting, on Friday, April 20th, on Van Ness Avenue, is often portrayed as the Army running amok with explosives, completely out of control and beyond any kind of civilian restraint. The truth is quite different, as noted by Captain Nichols of the San Francisco Fire Department:

"While in this vicinity [Van Ness Avenue] I [San Francisco Fire Captain F. Nichols, of Fire Truck No. 4, based at 1648 Pacific Street] witnessed the dynamiting which occurred on Friday night. After a consultation between the Mayor and several other officials, to decide who was to have actual charge of the operations, and after it was finely [sic] settled that the [acting] fire chief was to take full command; a crew of soldiers started dynamiting operations in this vicinity... Dynamiting seemed to be the only way to check the spread of the flames, but in this they were not successful. Our [fire] company...[was]...unable to find or obtain any water at all in this district. It was not until Saturday [April 21st] that the fire was finally stopped at Van Ness Ave."

As well as being under the direct authority of the Mayor and Fire Department, the U.S. Army had absolutely no control over the many other dynamite squads ranging over the burning city, even though it would subsequently be blamed for all of their excesses. Some were even committed by the historically sanctified San Francisco Fire Department:

"The first dynamiting was not an unqualified success. Too much dynamite was used, and in the wrong places... In general the plan was that soldiers cleared out the houses as the dynamiting squads advanced, but in one lodging house near the Embarcadero, [San Francisco Fireman Rudolph] Schubert, himself one of the dynamiters, found a number of men lying unconscious, either drunk or drugged--

either was common enough in San Francisco. The fireman dragged at the heavy, prostrate forms lying on the sleazy beds, but two could not be moved and had to be left to be blown up with the house."

Five months after the disaster, Patrick H. Shaughnessy, the new chief of the San Francisco Fire Department, wrote a thoughtful summary statement. Chief Shaughnessy in no uncertain terms elevated the U.S. Army to equal or even superior status with his own Fire Department in terms of responsible use of explosives. Shaughnessy pointedly omitted any mention of other organizations, such as the National Guard or Birmingham's civilian squad, which might be permitted to use dynamite in any future fire-fighting operations:

"San Francisco's fire department has long been recognized as one of the most efficient in the United States... and would have prevented the tremendous fire that swept over so many acres... had it not been hampered by the crippled water supply. The earthquake that preceded the fire was unexpected, and as a result of its violence water piping was twisted and broken. The supply of water that had proven so effective in times past was cut off and the [fire] department was forced to use dynamite as a means of stopping the fire...

Dynamite was used in great quantity to subdue the flames that swept over the city. In the hands of competent person the explosive is a valuable auxiliary in fighting fire when other means fail. Our [fire] department gained valuable experience in the handling of dynamite, and I trust that other [American fire] departments may profit by our observations. In the first place dynamite should be stored in an isolated spot and under the control of the United States Army. It should never be brought into use until by trained men, preferably soldiers, commanded by competent officers."

**MYTH 3: THE CANNON CONUNDRUM**

Every 3.2 inch U.S. Army field piece, and there were dozens of them at the Presidio, the Marin
Forts, and the outlying San Francisco forts, came with its own limber. Each limber would normally contain dozens of bagged smokeless powder charges as the "ready ammunition" for its gun. The gun limbers and attached guns were pulled by a four-horse team.

The ammunition limbers had a ring at their rear so that the 3.2 inch field piece they were dedicated to could be hooked up or unhooked within a matter of seconds. Once the detached gun was positioned, the limber was moved away from the firing line, so as to keep the ready ammunition out of the line of fire. Such limbers, consequently, were designed to be moved around independently of their guns. By far the safest way to move high explosive charges around a burning city like San Francisco in April 1906 was to leave them in their limber pockets until needed individually or in combination. Artillery caissons, or large, horse- or mule-drawn ammunition boxes without the provision for cannon attachment, were likewise employed.

An entirely fictional account of a Mayor Schmitz-General Funston confrontation on the second morning of the fire unfortunately breathes new life into our third unsubstantiated demolition myth:

"They approached Van Ness as the explosions grew louder and more frequent.

'Funston won't need a court-martial when I'm through,'

[Mayor] Schmitz stated angrily.

'I'll just have him hung and call it civil defense.'

[Police Chief] Donen stopped the car at Van Ness near Clay as soldiers fired a cannon at an apartment building on the east side of the street. The iron ball ripped through a fourth-floor window and tore off half the roof. The shot from a second cannon shattered the wall and sent the building crashing into the street...

Schmitz leaned his face closer to Funston's...

'Your first job is to stop. I told you hours ago to stop the dynamiting. I did not tell you to replace the dynamite with artillery fire!'\textsuperscript{105}

One of the most persistent and potentially controversial unfounded rumors about the firefighting activities of the U.S. Army are dubious reports of Artillerymen, presumably from the Presidio, the Marin Forts, or both, using cannon on the fire line to shell buildings, collapsing them into impromptu firebreaks. The lack of any photographic evidence for actual cannon used to bring down buildings ahead of the fire is not necessarily conclusive as there are no photographs of limbers or caissons in use either, despite abundant evidence that these were employed to move explosive charges around the city beginning on April 18th.

There are no reliable eyewitness reports that cannon were used to shell buildings. James B. Stetson, playing cat-and-mouse with the dynamite squads on Van Ness, would have mentioned artillery if it had been in use. Similarly, the vitriolic, hypercritical, army-bashing Henry Lafier would have used cannon as additional ammunition to shoot at his favorite target, Funston, if they had in fact been employed. Both Stetson and Lafier specifically note dynamite use on the Van Ness Avenue firebreak over and over again, yet neither mentions cannon.\textsuperscript{106}

The only contemporary claim for cannon being used to blow down San Francisco buildings is made by James Russell Wilson. Wilson first offers a second-hand, uncorroborated account initially made by "Helen Dare", who claimed that:

"Dynamite and gun cotton and even field guns are being used, blowing up whole blocks at a time."\textsuperscript{107}

Wilson identifies the putative eyewitness, Ms. Dare, as a "Los Angeles Examiner Reporter" with the obvious implication that her account was trustworthy. Wilson then goes on to claim that:

"Huge cannons were drawn to the avenue to aid the dynamiters in blowing up the mansions of the millionaires on the east side of Van Ness Avenue. Every available pound of dynamite was hauled to this point, and the sight was one of stupendous and appalling havoc, as the cannons were trained on the palaces and the shot tore into the walls and toppled the buildings in crushing ruins. At other points dynamite was used... The work
was dangerous, and many of the men... may have been killed while making this last desperate stand.\textsuperscript{108}

On only the second anniversary of the great disaster, April 18, 1908, Henry M. Stephens, a UC Berkeley professor, was already warning against letting exaggerated or false accounts about the earthquake and fire become transformed from myth into history:

"...newspaper reports cannot be invariably regarded as facts...having to appear at a fixed time every day allows false reports and false statements to slip in occasionally..."

The "cannon" story was not the only falsehood generated during the 1906 disaster:

"The story of the fighting between the Italians and Chinese in Portsmouth Square was a brilliant piece of imagination in the editorial rooms of a distant city; the Cliff House did not slide into the Pacific Ocean; and weird tales of rape and slaughter [that never happened] were served up for the satisfaction of an excited public, that relished a tale of horror..."\textsuperscript{109}

A few gullible writers have accepted Wilson's cannon claim at face value, without bothering to substantiate it with contemporary documentation. And, as we have already seen, a recent novelist has worked the cannon myth into his very readable and entertaining but completely fictional 1906 story. And, the myth has also been perpetuated in yet another medium, as a modern filmmaker has produced a quasi-documentary account of the 1906 fire based almost entirely on the fictional novel, rather than on actual historical records.\textsuperscript{110}

Not one of the incautious recent writers accepting the 1906 Wilson/Dare "cannon" account seems to have questioned the veracity of either, nor to have done any checking on "Helen Dare's" bona fides as a responsible reporter or even as a real human being. Yet even a cursory investigation reveals that "Helen Dare" was the nom de plume of a woman who occasionally wrote pieces for the San Francisco Call from the mid-1890s until at least 1908. Banking upon her notoriety as a primary selling point, she was just as frequently mentioned in the pages of that newspaper, linked to one scandal after another. In this respect it should be remembered that a byword of many newspapers at the time was that if there was not enough legitimate news to print, reporters often simply made up fictional "news" of their own. This was something that the fiction writer Helen Dare "dared" to do for a great many years.

"Helen Dare's" real name was Mrs. Elizabeth A. Tompkins. As "Helen Dare" in the early 1890s she was a reasonably well-known East Coast newspaper writer specializing in "sob sister" fictional fluff pieces. Mrs. Tompkins left her home and her husband in Washington, D.C. to attend the 1893 Chicago Columbian Exposition, and never went back. Moving on to California, she ignored the attempts of her husband to first compel her return, then to formally divorce her. "Helen Dare" finally signed her divorce papers in early October, 1896 and then a week later, on October 9th, married a well-known local gambler and horse-racing handicapper, Nathaniel Brough, in Alameda.\textsuperscript{111} A few days after the wedding, on October 12, 1896 Elizabeth Tompkins Brough's estranged husband, Gwynn R. Tompkins, was shot by John W. Collins, a jealous husband, in Washington, D.C. "Helen Dare" made certain that the local papers printed the salacious story, keeping her own name prominently inked.\textsuperscript{112} A year later another story, possibly apochryphal, of "Helen Dare" appeared. She was now identified as being on the [San Francisco] Examiner staff, and she and her husband, en route to the Yukon goldfields, were providing salacious entertainment for their shipmates through their amorous shipboard activities.\textsuperscript{113}

As a gag worthy of a Monty Python skit, "Hetfj Dare" continued to get press attention as the name of a thoroughbred horse active on racetracks in California and southern Arizona even while Mrs. Brough nee Tompkins was writing under the same name.\textsuperscript{114} "Helen Dare" the racing mare was mentioned in California newspapers both before and after the 1906 earthquake and fire.\textsuperscript{115} It is not known whether the name was the creation of her racing husband Brough.

And, if an equine "Helen Dare" were not laughable enough, "Helen Dare" was also the fictional name in a 1908 four-act San Francisco stage play about a ruined woman trying to redeem herself while various husbands, ex-husbands, lovers and ex-lovers entered and exited the stage.\textsuperscript{116} The actress no
doubt based her make-believe character on the make-believe "reporter" flitting on and off the pages of the various local papers and, unfortunately, into Wilson’s 1906 account of the San Francisco Earthquake and Fires.

Our own conclusion is that the 1906 Dare/Wilson claim that "cannons" were used to blow down buildings in San Francisco is completely fabricated. Most generously, it could have either been the result of the two writers not knowing enough about artillery to keep from confusing cannon caissons or limbers with the actual cannons themselves, or simply elaborating hearsay accounts of dynamite explosions described to them as loud as cannon fire into secondhand retellings now enhanced into fictional "cannon fire." Adjectives describing auditory stimuli, however, do not equate with actual ordnance being fired, or physically present.

In the final assessment, if some of the dynamiters were playing fast and loose in San Francisco, such as the drunken civilian Bermingham, and doing more harm than good, then aimed artillery fire at specific architectural targets so as to bring them down would certainly have been an improvement. If such pinpoint accuracy was required, there is little doubt that Sergeant Dillon, a First Class Gunner with combat artillery experience in the Philippines and China, no doubt would have been pressed into service. After all, he was a veteran of Reilly's famous battery, which had blown down the gates of Peking during the Boxer Rebellion only six years earlier. Yet, in no reliable contemporary account is there any specific mention of cannons being used by any identifiable artillery unit. It is absolutely certain that if they were so used, then Sergeant Dillon would have been one of the artillery experts pulling the lanyards. Dillon, however, never mentioned using cannons during his 1906 fire-fighting activities to his four sons.

THREE "EXPLOSIVE" MYTHS DEMOLISHED

The present article may be the first objective overview specifically detailing how the demolition squads worked over three days to help save San Francisco from the greatest urban firestorm of modern times outside of war. It is also an exercise in reputation repair for the U.S. Army, which, in 1906 and ever afterwards, was unjustly criticized for the fatal shortcomings of others. More than a century later, the regular Army continues to be blamed for the excesses and errors of judgment made by a great many other actors on the scene. These include, but are not limited to, the San Francisco Fire and Police Departments, Governor Pardee and his California National Guard, the near-vigilante "Citizen's Guard," the incredibly corrupt and dishonest San Francisco city administration, and most certainly Mayor Schmitz of San Francisco and his controller, Abe Ruef.

We are not arguing that the U.S. Army was blameless in 1906 San Francisco, only that it is high time that other persons and agencies whose reputations have remained unsullied through historical myopia now face their own fair share of criticism. A hundred and six years after the fires were put out, a balanced and objective view of the regular Army's successes, as well as its failures, is certainly long overdue.

We believe that each of the three unfounded myths about the dynamite squads has been resoundingly demolished in the preceding pages. The first myth, that there was but a single demolition unit, popularly known as the "dynamite brigade," is completely incorrect. Equally in error is the assumption that all of the demolition was done by the U.S. Army and that all of the mistakes and/or excesses made by any and all people doing demolition during the fire can be laid exclusively at its feet. In actuality more than a dozen different demolition squads, not all of them even employing dynamite, and more than half of them incorporating no U.S. Army personnel at all, blew up buildings in San Francisco during the three days of the fire (Table 1).

The second myth, that U.S. Army demolition men acted irresponsibly, without the advice or consent of the civil authorities in both planning and carrying out demolition, is also absolutely wrong.

In point of fact, the Army's initial involvement was desired by the civil authorities, and, from start to finish, dynamiting was done at the express request of the Mayor and the Fire Department. The Army, dynamite squads solicited the advice and consent of the civil authorities from the onset, and of civilian experts in the use of explosives, incorporating them into their demolition squads whenever they could. Far from running fast and loose with dynamite, the Army squads refrained from blowing many buildings until ordered to by either Fire Department or Mayor's Office representatives.

Perhaps more importantly, many of the demolition efforts "gone wrong" that resulted in exacerbating
the fires were, in fact, the work of other demolition squads, including those of the San Francisco Fire Department itself, with no Army involvement. And finally, when the Army did indeed make a critical mistake, like as not it was at the suggestion if not the order of the civil authorities. This notwithstanding, the U.S. Army to the present day has shouldered the blame for all the improper demolition, almost as if their solitary goal was simple, wanton, destruction.

The third and final myth, that the Army acted as a "loose cannon" (pun intended) during the firefighting effort, using artillery pieces to blow down buildings, is so ludicrous as to be laughable. This myth can be traced to a single 1906 fabrication that subsequently took on a life of its own. This falsehood has been repeated most recently by historians completely ignorant of basic artillery capabilities and by quasi-historians more interested in blackening the reputation of the U.S. Army than in getting their facts straight. There is absolutely no evidence to support the myth that artillery was used against buildings in San Francisco, nor can it be substantiated by any official report, any reliable personal recollection, or any photographic evidence.

AFTERMATH

The 1906 San Francisco conflagrations were as great a turning point in California history as the Gold Rush had been more just over a half-century earlier. The disaster killed thousands of people, left a quarter-million homeless, and bankrupted hundreds of companies and tens of thousands of private citizens. But, it also led to a city-wide administrative house-cleaning, and to the modernization of fire departments across the state and country. It fostered earthquake-safe building codes, and it propelled geologists, structural engineers and fire safety experts to the forefront of the public's consciousness. Most significant, however, is a demographic fact ignored or forgotten by the vast majority of California's modern population: the 1906 disaster triggered the shift of power and population away from the northern to the southern half of the state, a process still ongoing today.

Once the flames were finally out, the Army got down to organizing the biggest emergency relief effort in U.S. history. On April 22nd when units from the 14th Infantry and the 17th and 18th ("Mountain") Batteries of Field Artillery arrived from Vancouver Barracks, they were put to work on the recovery just getting underway. Every tent in the possession of the United States Army was sent to San Francisco for the housing of earthquake and fire victims. Tent camps sprang up in every park and many open areas throughout San Francisco. The U.S. Army ran all of the refugee camps in Golden Gate Park, at the Presidio, and in virtually every public park and square within the city for the next several months while rubble was cleared and streets were re-opened. The tents were soon replaced by temporary, barrant-type short-term buildings of rough-sawn planking. The Army formally withdrew from San Francisco on June 30, 1906, transferring all law enforcement powers back to the San Francisco Police Department.

Long before this, however, the witch-hunt began in search of those to blame for any part of the catastrophe not attributable to Mother Nature. The local press sharpened up its knives and went after Mayor Schmitz and his crony, Abe Ruef:

"Once the immediate quake, fire and plague crisis was over, the city returned to the unfinished business of rooting human vermin out of the palaces of government. . . Schmitz and Ruef . . . were [eventually] convicted of accepting payoffs from French restaurants that were fronts for prostitution. . ."119

Frederick Funston emerged as the living hero of the hour, in large measure through his own self-promotion, while Fire Chief Dennis Sullivan became the universally mourned martyr. Acting Fire Chief John Dougherty stepped down two months after the fire, and was succeeded by Chief Patrick Shaughnessy. The murderous excesses of the National Guard and the Committee of Safety, while decried, were not pursued with much vigor, once Schmitz and Ruef had been selected as the premier scapegoats.

As insurance claims began to be denied, recriminations over the use of dynamite in fighting the San Francisco fire escalated. With Mayor Schmitz, who gave the orders to dynamite, already in the crosshairs, other culprits, the ones who did the actual blasting, were now searched for, considered by some to be accessories of the criminal mayor. The U.S. Army circled its wagons, bracing for the
anticipated storm of criticism and demands for financial restitution for its dynamiting of hundreds of buildings, buildings whose owners now claimed had not been damaged by the earthquake, and which would never have burned in the fires.

The Army selected a very few spokesmen to write official reports on the fire-fighting effort, knowing that all would constitute legal documents. The Army's official position, consequently, was offered very much in "chain of command" form. The official report came out under General Greely's signature with substantial sections written by Brigadier Funston, and elements abstracted from other officers, including Coleman and Briggs.\textsuperscript{120}

Captain Le Vert Coleman was ordered to write a stand-alone report on his activities as the officer in charge of "the dynamite squad," the decision having been made by higher-ups to admit to the existence of only one such official demolition unit. Coleman's report was made to the Post Adjutant (the Presidio's highest ranking legal officer) at the direction of the Commanding Officer. Coleman's amazingly brief statement is more revealing of what was left out rather than what stayed in.\textsuperscript{121} Lieutenant Briggs was likewise ordered to submit a report on his actions running the initial dynamite squad prior to Coleman's arrival on the fire line the first day. Briggs' report is limited to exactly that, and not one word more.\textsuperscript{122}

The Coleman and Briggs reports were bureaucratically buried, the former not coming to light again until 1987. Artillery Colonel Morris, in titular charge of the San Francisco Presidio with Greely away in the Midwest, and Funston initially absent on the fire line, wrote no separate report, but nevertheless responded specifically to a claim against the Army by an irate private citizen, whose building had been dynamited by U.S. regulars, in a letter to the Acting Secretary of War, denying any Army culpability.\textsuperscript{123}

Funston, an experienced writer and author in his own right, went into public relations attack mode and wrote an "out of channels" popular account of the army's actions for \textit{Collier's Magazine}.\textsuperscript{124} Funston's account painted the Army in glowing terms, and either ignored or underplayed controversial decisions that were even then generating a new firestorm of criticism.

Outraged civilians whose homes or businesses had been dynamited considered Greely's 1906 report a self-serving whitewash calculated to deflect all blame from the U.S. Army, which of course it was, and it very successfully did. As burnt-and-blasted out millionaire property owners wrangled with bankrupt insurance companies, the work of the dynamite squads became a delicate and then a taboo subject within San Francisco military circles. All participants not specifically ordered to testify were admonished, essentially to "keep your mouths shut, and do your duty."

There is no written confirmation of Coast Artillery Sergeant William T. Dillon's activities with the dynamite squads in Greely's, Coleman's nor Briggs' reports, but that is neither here nor there. Coleman and Briggs likewise made no mention of their unfortunate fellow U.S. Army dynamiter.

Figure 16: Captain William T. Dillon, Coast Artillery, retired. Note three rows of "fruit salad" pistol and rifle marksmanship devices, three overseas service chevrons on left sleeve. Dillon's final photograph, taken by his son Jack in Sausalito, California, 1938. W.T. Dillon Collection.
Lieutenant Pulis, nor of any of the other dozen dynamite squads in operation simultaneously with their own. The omission of Sergeant Dillon's name should therefore be construed as a lack of evidence, rather than actual evidence of a lack. Obviously, if specific regular Army dynamite squad members such as Sergeant Dillon could not be identified, then they couldn't be called to testify in the hundreds of post-fire insurance claims that were attracting as many lawyers to San Francisco as the hundreds of privies in the refugee camps were attracting flies.

Once the clean-up demolitions were over, the regular Army began getting those individuals most intimately involved with the dynamite squads out of the line of fire. Just as anonymous persons cannot be called to testify, identifiable witnesses who cannot be located also cannot testify. The junior officers most intimately involved in the effort, including Captain Coleman, were quietly transferred out of the San Francisco Presidio.125

Temporary shuffling even extended to non-commissioned officers as well. Sergeant Dillon was detached from his regular post with the 61st Coastal Artillery Company at Fort Baker, and sent off to Cuba as part of the "Pacification Program" in October, 1906 in response to what was being called a looming "second Cuban war" in the newspapers. Dillon's transfer may have had as much to do with keeping him away from San Francisco until the backlash over the dynamite squads had cooled down as with any real need for his services as an artilleryman in the Caribbean.126

Meanwhile, towards the end of 1906 Mabel Burke's Dutch Protestant mother died, and was buried in Fernwood Cemetery with the assistance of her Catholic "sisters" of Sausalito's Rainha da Gloria. Portuguese comadria.27 Mabel now had no job, no income, no mother, and a father gone off the rails with the "Irish failing" in response to his wife's death. So, strapped for cash, Mabel Burke sold her two corner lots on San Francisco's Bay Street for a paltry 200 dollars each. She truly believed that "nobody would ever want to live there again" within the burnt-out city.

But San Francisco did begin to rebuild, slowly at first. The clean-up operation alone took a full year. Tons of rubble were used as landfill, and dumped into the bay. Every sawmill in the state began working multiple shifts in response to the lumber demands of post-fire San Francisco, and hundreds of small logging camps sprang up throughout the North Coast ranges, the Sierra Nevada, and the Cascades to satisfy San Francisco's insatiable hunger for building materials. The California insurance industry took a nose-dive, but the construction trades boomed as swarms of carpenters, bricklayers, plumbers, pipefitters, and electricians headed for the ruins to get in on the rebuild. And, far from shunning dynamite as a future means of fire-fighting, the new, post-1906 San Francisco Fire Department took steps to incorporate a permanent Dynamite Squad.128 Not wanting to be left behind, so did the fire departments of other, smaller, California cities, including Los Angeles.129

General Greely retired not long after the relief effort was underway, leaving both the limelight and the headaches for his subordinate Brigadier Funston. Reflecting civilian criticism like so much water off a duck's back, General Funston was widely praised for his 1906 actions within military circles. He continued to enjoy the friendship and support of President Roosevelt, and later of Presidents Taft and Wilson. Leading citizens of San Francisco, including Senator Phelan and Mayor Rolph, pressed for Funston's promotion to Major General in 1913, arguing that it was only due as "the man who saved San Francisco" in 1906. Funston, after directing the overall U.S. Army effort on the Mexican Border and as John J. Pershing's superior during the 1916 Mexican incursion, was tapped to lead the American Expeditionary Force to France in 1917. Only his untimely death led to the installation of General Pershing as his substitute. Funston was buried at the San Francisco Presidio in 1917.

When Captain Le Vert Coleman left San Francisco in 1906, he left his position as Presidio Ordnance Officer. A dozen years later, William T. Dillon, now a Captain, would inherit it. Lieutenant Raymond Briggs slowly worked his way up the military hierarchy, moving from the Field Artillery into the Inspector General's Department, where by 1927 he had reached the rank of Lieutenant Colonel. By 1931 Briggs earned his final rank of Colonel.130 Briggs would also be followed into the Inspector General's Department by Captain William T. Dillon as his final or "tailgate" assignment.

There are no coincidences in military service and promotion; if Sergeant Dillon had not favorably impressed both Captain Coleman and Lieutenant Briggs in 1906, he would never have been moved up from the enlisted ranks and made an officer, nor followed both in their own career paths later.
Mustang Captain Dillon retired in 1928 as an Inspector General officer after 30 years of military service. Ten years afterwards, Captain Dillon was buried at the San Francisco Presidio not too far from his old commanding officer Frederick Funston. Another 24 years later, Mabel Burke Dillon would also be laid to rest at the Presidio next to her husband.

The April, 1906, San Francisco Earthquake and Fires was the least-known, and remains the most poorly understood, quasi-military campaign ever conducted by the U.S. Army on American soil. General Greely's General Order No. 42 praised all the regular branches of the service (Army, Navy and Marines, conspicuously excluding the National Guard) in noting that their duties "brought together the largest force of the Army and Navy ever engaged in a nonmilitary service under the American flag."

The Earthquake and Fire Campaign ribbon is amongst the rarest of all official or unofficial U.S. military decorations. The very few men entitled to wear it were constantly being asked what "that" ribbon in their "fruit salad" collections indicated. Allen Wagner, a young naval officer who fought against the 1906 San Francisco fires, seldom paid for his own drinks in bars. He was accustomed to betting the price of his drinks against the ability of other military men to guess what the 1906 Earthquake and Fire Campaign ribbon on his uniform stood for. Few, if any, ever could, except for when the bar was in San Francisco.

In 1907 Sergeant Dillon returned from Cuba to California and to Fort Baker. The following year, Admiral Robley D. (Fightin' Bob) Evans, a distant relative of Mabel Burke's, led Teddy Roosevelt's Great White Fleet in through the Golden Gate. The appearance of the spectacular flotilla sent the message to San Francisco, now rebuilding in earnest, that the entire country was behind it. Mabel took a small boat out from Sausalito to greet her distinguished relative on the deck of his own flagship.

Early in 1909 Sergeant William T. Dillon and Mabel Burke met in Sausalito at a St. Mary's Star of the Sea Catholic Church Friday night dance. Two mornings later, they had their first "date" at the Star of the Sea Sunday choir practice. A year after that initial musical encounter, Dillon was promoted to First Sergeant, and Mabel stopped trying to persuade him to quit the Army.

The couple was married inside the same church where they sang together weekly. The Dillons lived first at Fort Baker, then at the Presidio, and finally, after World War I, in Sausalito.

First Sergeant Dillon took part in the military displays prominently featured during San Francisco's 1915 Panama Pacific International Exposition. These included precision drill by horse-drawn batteries, firing 3.2 inch cannon salutes, and even live-fire demonstrations with 12-inch guns out at the coastal gun emplacements. Originally planned to celebrate the opening of the Panama Canal, and the ties of brotherhood between all of the American republics and those nations across the broad Pacific, the Exposition became as much a local celebration of San Francisco's rebirth, "a tribal celebration of reincarnation," as it was a national commemoration of the new shortcut between the American continents. With the Panama-Pacific Exposition, San Francisco's citizens were well on the way to suppressing their memories of the great natural disaster of only nine years before.

"King Bill" and Mabel Dillon had four sons, born either at the San Francisco Presidio or at home on Johnson Street in New Town Sausalito. Long after William T. Dillon's service with the dynamite squads, in 1928 at the end of his military career, his second son Jack asked him "why did you blow up the City, dad?" The question was the outgrowth of discussions of the earthquake and fires at school, wherein the dynamite squads had come to be portrayed as irresponsible and wantonly destructive, almost as bad as their contemporaries, the anarchist bomb-throwers. Captain Dillon told his 13-year-old son that during the time he and his fellow regulars were "blowing up the City," right and wrong simply did not enter into it. They were fighting an enemy, fire, with the only weapon they had. The regular Army soldiers were carrying out the orders of the civil authorities from the Mayor on down and they were working at the direction of San Francisco city firemen. Dillon and his fellow enlisted men were not blowing anything up on a whim, and certainly not for the pure and simple joy of destruction.

Sergeant Dillon's work with the San Francisco dynamite squads in 1906 was an urban battle, not against opposing soldiers, but against a completely unpredictable natural force: fire. Although some buildings or even city blocks may have been, in the ultimate assessment, demolished unnecessarily (and this was subsequently argued for every building by its own specific owner), the dynamite squads undoubtedly saved much of San Francisco that would
have otherwise burned. The harshest critics of the dynamite squads, and of the U.S. Army’s actions during the disaster as a whole, typically forget three critical facts: not all of the city burned; much of it was saved; and it was the U.S. Army that created and held the defensive line along Van Ness Avenue that stopped the fire from destroying the western 2/3rds of the City. And because the city did rebuild, each of Mabel Burke’s Bay Street lots, offered at “fire sale” prices in 1906, would eventually, more than a century later, be worth millions.

The 1906 Earthquake and Fires have taken on a kind of mythological unreality to most modern residents of California. The national recollection of the event, unfortunately, continues to slide from fact inexorably towards fiction. This is because the vast majority of today’s Californians, no less than their ancestors, arrived in the Golden State long after San Francisco had recovered from its greatest catastrophe. The 1906 disaster is even more intangible to Easterners, to whom the very idea of earthquakes is somewhat fanciful. But to that tiny minority of the state’s present population descended from survivors of the disaster, and that even smaller fraction descended from those who actually fought the conflagrations, the 1906 San Francisco earthquake and fires were defining moments in our history never to be diminished by the passage of time.

ACKNOWLEDGMENTS

Historian John A. Martini, former Curator of Military History at the Presidio of San Francisco and Supervisory Ranger for the Marin Headlands, provided invaluable assistance within the historical contexts he knows better than any other authority. Historian Russ Pearce’s constant encouragement, helpful research suggestions, and insight into the workings of the U.S. Army of a century ago set us on the right track time after time. Our compadre, the late Dr. Michael Mathes, read earlier versions of our manuscript and his corrections and suggestions kept the self-embarrassment quotient of the preceding pages down to a minimum. Tommy Killion, Brian’s good friend since they both became Mill Valley Cub Scouts in 1961, graciously let us borrow the term he coined as the title of his outstanding first book, *Fortress Marin* (Figure 1).

The Bancroft Library at our alma mater shared its invaluable holdings on the 1906 disaster. Gladys Hansen, the greatest living authority on the San Francisco Earthquake and Fires, shared her insights on the activities of the dynamite squads during that catastrophe, and sent us copies of original documents bearing on the subject. We also made very great use of Hansen’s Museum of the City of San Francisco, particularly its photographic holdings and unpublished eyewitness documents, and are thankful for this wonderful resource. We are grateful to our friends at the Sausalito Historical Society and the Marin County Free Library’s Ann T. Kent California Room, who provided access to unique documents unavailable anywhere else. The Veridian Digital Library Software Program put facsimile issues of the Sausalito News, the San Francisco Call, and other contemporary newspapers at our fingertips; we gratefully acknowledge this “wave of the future” means of conducting historical research.

Finally, and most importantly, retired U.S. Army Colonel John A. (Jack) Dillon (1915-2001), W.T. and Mabel’s second son, suffered through numerous interviews over a twenty-year period, answering many questions about his father’s military career and attitudes. It was Jack Dillon, after all, who asked his dad why he blew up San Francisco in the first place, and with this innocent question nearly 80 years ago began the process culminating in the present writing.

ABOUT THE AUTHORS

Richard Hugh Dillon, the youngest of William T. and Mabel Burke Dillon’s four sons, was born in Sausalito, California, in 1924. His nick-name while a teenager was Duke López. He obtained an MA from UC Berkeley in Mexican History in 1949. Richard H. Dillon is a prize-winning historian with more than two-dozen hardcover non-fiction books published, most of which have gone into paperback. He is also the author of hundreds of short magazine and journal articles and uncouneted book reviews.

His oldest son, Brian Dervin Dillon, was born in Oakland, California in 1953: his middle name is his grandfather’s original patronymic. Brian earned a Ph.D. in Maya Archaeology in 1979, at age 25, the youngest in the history of his U.C. Berkeley Department. A Phi Bete Kappa and Fulbright Fellow, Brian is widely published in Central American and in California archaeology.

His son, John Dervin Yi An Dillon, was born in
Lionized: Laveaga n.d.; Morris 1906: 62-64. Laveaga refers to the head of the dynamite squad he encountered on Van Ness the night of the 19th as the “Captain of the Marblehead,” and muses that if he, or persons like him, had been given free reign to dynamite well ahead of the fire on the first day, then the fire might have been stopped much earlier.

Civilian Charles Morris’ sensationalistic account would have one believe that just one three-man U.S. Navy demolition team was exclusively responsible for “saving” San Francisco from the flames by its work along the Van Ness Avenue fire break on the final day of the fire, without any help from the U.S. Army or San Francisco Fire Department. Morris copied his account virtually verbatim from a contemporary news story printed by numerous California newspapers, including the far-away Amador Ledger (1906). Later writers such as Smith (2005), accepting the Morris story at face value, extol the fire-fighting virtues of the U.S. Navy, including their use of dynamite, as if there had been a century-long U.S. Army conspiracy to erase and suppress all documentary evidence of them. This was obviously not the case.

Some critics of the Army’s dynamiting of the mansions on the east side of Van Ness seem to want to have it both ways: their vituperation is directed at the regular Army for their supposed wanton destruction of the finest part of the city, while at the same time they are eager to lionize the three Navy men who “saved San Francisco” by doing the same thing the army was accused of. To some modern writers, then, explosives were a good thing when in the hands of the Navy, and only a bad thing when used by the Army.

86. CNG Brigadier Koster’s Dynamite Wagon is Hijacked: Koster 1906.
87. SF Fire Department Dynamite Squad in Action in three different locations: Corew 1906.
88. Tunnels at Baden: Baden was the 1906 name for what became known as South San Francisco,
after its incorporation, in 1908. Baden was just "over the line" in San Mateo County, and had been named by Charles Lux, the famous cattle and land baron, after his German birthplace (Gudde and Bright 1998: 23).

89. Second San Francisco Fire Department Dynamite Squad in Action: Conlon 1906.

90. Second SFFD Squad Alternates Between Water and Dynamite: Conlon 1906.

91. Third SFFD Dynamite Squad Works South of the Slot: Murphy in Bowlen 1906: xxx42.

92. Bribing the San Francisco Fire Department Not to Dynamite: Dillon 1985: 152.


95. Second Civilian Dynamite Squad: Lafer 1906: 5.


97. Civilians Ordered to Cease and Desist Dynamiting: Mayor Schmitz, in SF Call 1906b.

98. Dynamite "Brigades:" Los Angeles Herald 1906.


100. Lt. Briggs Commandeers Tugboat, Steams to Pinole for More Dynamite: Freeman 1906.


103. SF Fire Department Kills Two Drunks with Dynamite: Sutherland 1959: 111.1906 fireman Rudolph Schubert stayed in, eventually rising to the rank of Battalion Chief in the San Francisco Fire Department.


105. Fictional Account of Artillery in Action: Dalessandro's completely fictional account of General Funston blowing down buildings on Van Ness Avenue on the second morning of the fire makes exciting reading, but the event as described absolutely, positively, never happened. Historical errors in Dalessandro's prose such as using "iron cannon balls," which of course had passed from the scene with the advent of breech-loaders a quarter-century earlier, need not be objected to as fiction need not make technological nor chronological sense (Dalessandro 2004:334-335).


108. Nonexistent "Field Guns" Transformed into "Huge Cannon:" Wilson 1906: 102. Dare's putative "field guns" now, through a stroke of Wilson's pen, have been transformed into "huge cannon." Compare Figure 14 with Figure 3. Nobody who had ever seen a 12-inch cannon up close would ever confuse a small 3.2 inch horse-drawn field gun with a "huge cannon."

109. UC Berkeley Prof Warns Against Fiction Being Accepted as "History": Stephens, 1908. Morris, 1906, not mentioned by Stephens by name, repeated the bogus story of the non-existent Portsmouth Square Riot, amongst many other exaggerations and fabrications in his 1906 best-seller about the disaster.

110. Recent Echoes of Dare and Wilson's 1906 "Cannon" myth: Thomas and Witts 1971: 174; 177; Kurzman, 2002: 194-195; Smith 2005: 218; 226. Thomas and Witts incorporate so many erroneous statements (secret tunnels, etc.) into their narrative that their two mentions of "cannon" are best understood as dramatic devices, not fact. Kurzman takes every opportunity to demean and discredit the military response to the 1906 disaster. He offers no contemporary, corroborative, evidence that cannon were used during the fire to bring buildings down, only yet another fictional account of a gunner so badly concussed that he had to be carried from place to place just to fire his cannon, its operation being, for some unexplained reason, a mystery to all others present (!!). We consequently consider his claim that cannon (in this case, just one) were so used as simply one more fictional convenience in support of his strident anti-military diatribe. See also Latchin (2002:xxvii) for criticism of Kurzman's anti-Army bias.

The most recent uncritical re-use of the cannon myth is by Smith, whose personal mission seems to be the deification of the San Francisco Fire Department and the United States Navy at the expense of the U.S. Army. Smith never misses a
chance to demonize General Funston, by attempting retroactive pop-psychological analyses of his motivations, and by playing the "what if" card. Both are dangerous practices that all historians need to guard against lest their writing starts sliding down the slippery slope towards fictional invention. Smith's discussion of dynamiting is hopelessly scrambled, and his second mention of artillery seems to confuse cannon with dynamite. Neither are surprising in light of his earlier confusion about different kinds of explosives, their characteristics, weight, bulk, volume, and portability.

Smith's parroting of mythological cannon being fired along Van Ness Avenue is in keeping with his basic lack of control over chronology and geography as demonstrated throughout his book. Smith promotes Naval Lieutenant Freeman to "Lieutenant Commander Freeman," but demotes Presidio Ordnance Officer Captain Coleman to "Fort Mason ordnance officer." He moves Fort McDowell from Angel Island westward "just across the Golden Gate" as if it were one of the Marin Forts, he converts a Mexican period Rancho (a geographic unit) to a "Ranchero" (a Spanish-speaking human being who hangs out with cattle), and he has General Funston's wife walk to "Letterman Hospital" fully five years before that institution would be so named. The list could go on and on.

111. "Helen Dare" Unmasked: San Francisco Call, 1896a.
112. "Helen Dare's" Ex-husband shot by Jealous Husband: San Francisco Call 1896b.
114. "Helen Dare" Joins the Staff of the "Call": San Francisco Call 1905a.
115. "Helen Dare" the Racehorse: San Francisco Call 1905b; Los Angeles Herald 1909.
116. "Helen Dare" the Stage Character: San Francisco Call 1908b.
117. "Sounds Like Artillery," "Sounds Like Cannon:" The adjectives are commonly encountered in many contemporary eyewitness accounts of the dynamiting, and even in the context of sewer gas explosions (Kelly 1906). Similar descriptions are also to be found in the official report describing the sound of the initial earthquake (Lawson 1908-1910).
118. Model 1897 3.2 inch Field Guns: First Sergeant Dillon would serve these horse-drawn field pieces two more times, during their final outings on the Mexican Border a decade later, in 1914 and again in 1916-17. His 61st Coast Artillery Company, for their swan-song, was honored by the temporary designation of the 1st Provisional Field Artillery.

125. Captain Coleman Sent Out of the Line of Fire: San Francisco Call 1906d.
126. Sergeant Dillon Sent to Cuba, 1906: Dillon's fluency in Spanish and prior experience serving with irregular troops would have been persuasive arguments for his temporary posting to Havana. He was charged with training local Cuban troops, who would eventually take the place of American ones. The temporary transfer was no punishment, for Coastal Artillery non-coms retained their rank and seniority regardless of temporary postings, unlike their less fortunate counterparts in the infantry or cavalry, who lost both if they left their original unit. Detached duty for Sergeant Dillon in the Caribbean after his dynamite squad service was consequently to his advantage, for the almost unreachable rank of First Sergeant, which Dillon of course aspired to, was normally only filled by sergeants with the greatest and most diverse campaign experience as opposed to those only with time-in-grade garrison duty.
127. Rainha da Gloria at Mrs. Redmond Burke's Funeral: Sausalito News, 1906. Most of Mrs. Burke's closest Sausalito friends were Portuguese, Italian, and Mexican Catholics. So was, of course, her Irish husband. She therefore saw no contradiction in being a nominal Protestant belonging to a Catholic comadria or service organization.
128. 1908 US Army, SFFD Dynamite Squads: San Francisco Call 1908a; 1908b.
129. Los Angeles Fire Department forms its own Dynamite Squad: Los Angeles Herald 1906.
131. 1906 Response the Largest Military

132. 1906 Fire Campaign Ribbon: Naval officer Wagner was our good friend Franklin Fenenga’s father-in-law. Fenenga (1917-1994) was a well-known UC Berkeley archaeologist, and WWII U.S. Marine Colonel. The 1906 San Francisco Earthquake and Fire campaign ribbon story was one of his favorites.

133. The PPIE a “tribal celebration of reincarnation”: Dillon 1963: 131.

134. The City: then, as now, any reference to “the City” by Northern Californians can only mean San Francisco. The unspoken inference, sure to enrage any Southern California resident, being that it is the only city worth mentioning within the state.

135. Earthquakes: Only those who have lived through a major quake can begin to comprehend how terrifying and destructive the great 1906 San Francisco earthquake was. The senior author was present during the 1976 Guatemala earthquake, which killed around 25,000 people in a nation of only five million, and knocked down every fourth structure within the country. Although no great fires followed it, people were still being killed by falling debris from unstable buildings up to six weeks after the event. From this perspective, recent California earthquakes, such as the 1994 Northridge and 1989 Loma Prieta temblors, were small potatoes compared to the great 1906 San Francisco Earthquake.

REFERENCES CITED


Carew, William [Captain, San Francisco Fire Department Truck Co.7, Station 3050 17th Street] Report to the San Francisco Fire Department. 1906 Unpublished document accessed online via the San Francisco Museum: sfmuseum.or/1906/colem.html

Clark, Donald Thomas Santa Cruz County Place Names: A Geographical Dictionary. Santa Cruz Historical Society, Santa Cruz, CA, 1996.


Dillon, Richard H.


Duke, Thomas S. [Captain, San Francisco Police Department] Synopsis of the San Francisco Police and...


Haan, W. G. [Captain, General Staff, Acting Chief of Staff to General Greely]. General Orders Number 42, Headquarters, Pacific Division, July 2, 1906. San Francisco, Presidio.


Morris, Charles [Colonel, Artillery Corps] Report to the Acting Secretary of War, via the Military Secretary, Department of California, Presidio of San Francisco, 1906. Unpublished document accessed on line via the San Francisco Museum: sfmuseum:or/1906/dynamite.html


Murphy, T.J. [San Francisco Fire Department Captain] "Experiences of Captain T.J. Murphy, Engine 29 and His Men, 1906. Station: Eleventh and Bryant Streets" in Bowlen, Reports of Fire Officers of the San Francisco Fire Department on the Fire of 1906. Bancroft Library, University of California, Berkeley, Manuscript C-R 68: xxx41-43.


San Francisco Call [Newspaper] 1896a "Divorced and Wedded. Marriage of "Helen Dare" Follows the Annulment of her Former Relations." October 10, Volume 80, Number 132. Accessed via Veridian Digital Library Software Program on 10/23/2012.


1905a "Helen Dare's Pen Will Portray Life: Gifted Woman on the Call." April 15, Volume 97, Number 137. Accessed via Veridian Digital Library Software Program, 10/23/2012.


1906b "Mayor Issues Proclamation: Gives Warnings About Many Questions of Health." April 29, Volume


San Francisco Call-Chronicle-Examiner
1906 A remarkable combined edition of all three major San Francisco newspapers, displaced by the disaster, printed in Oakland on April 19.

San Francisco Chronicle
1906 "Scared Guards Shoot Horse." Undated newspaper clipping accessed online via the San Francisco Museum: sfmuseum.net/press/clips7.html


Stephens, Henry Morse "How the History of the Disaster is Being Made." San Francisco Examiner, April 18, 1906.

Stetson, James B.
1906a Statement of James B. Stetson, Esq., Member of the Firm of Holbrook, Merrill & Stetson, President of the California Street Cable Railroad Company. San Francisco, June 22nd, 1906. Unpublished manuscript, University of California, Berkeley, Bancroft Library Mss C-D 5100.

1906b San Francisco During the Eventful Days of April 1906. Murdock Press, San Francisco, CA.


Virtual Museum of the City of San Francisco
1906a The Killing of Joseph Meyers, Superintendent of the Children's Playgrounds, by Corporal Jacob Steinman of the National Guard. Undated, anonymous statement accessed on line via the San Francisco Museum: sfmuseum.org/sfpd/06pd3.html


