

Samuel G. Black

SAN DIEGO AND IMPERIAL COUNTIES CALIFORNIA

A Record of Settlement, Organization, Progress
and Achievement

BY SAMUEL F. BLACK

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CHAPTER XLIV

SAN DIEGO—PANAMA EXPOSITION

On July 19, 1911, ground was broken for the exposition to be held in San Diego, commemorative of the opening of the Panama canal. The pageantry, exercises at the exposition grounds and noted men and women taking part therein, were all described in a felicitous manner by John S. McGroarty, editor of the West Coast Magazine. His article is given below:

"On July 19th last, ground was broken for the Panama-California Exposition at San Diego. On the day of the ground breaking and for three days following, the event was fittingly celebrated in a most unique, unusual and impressive manner by the people of San Diego and many thousands of visitors from other parts of California and the world. Pageantry by day and by night, carnival that revived the old Spanish spirit of care-free and pleasure-loving California, music, color and gaiety held sway.

"Historically, epoch-making, and from a serious point of view the celebration was distinctly important. The success of it all, which was very notable, indeed, is regarded as a certain indication that San Diego's Exposition in 1915 will prove the most attractive as well as the most unique show ever given on the American continent.

"The San Diego Exposition will be entirely different from the world's fair to be held in San Francisco in 1915. The San Diego show will be a Pan-American affair. Congress has recently authorized the president to request the republics of South and Central America to participate in the Exposition at San Diego. As a consequence, these nations will make great efforts to be splendidly represented. In addition to all this, our own southwest will be exploited in a fascinating manner, its ancient life and history will be shown—antedating as it does, the civilization of any other portion of the United States—and its progress in mineral, agricultural and commercial lines will be brought out in an original and vivid manner. Irrigation will be particularly exploited with all the miracles that have been wrought in its name.

"The San Diego Exposition will be a floral and a horticultural wonder. It will be an archaeological and ethnological marvel. Every flower that grows, every tree that man has known, the prehistoric races of man, the ancient temples in which they worshiped, the sacrificial altars, the pueblos, the cliff dwellings and the tepees of the nomads—all these will appear. No exposition of such fascinating possibilities has ever been planned or dreamed of before anywhere in the world.

"The ground-breaking for the Exposition was fixed to take place practically

on the anniversary of the foundation of San Diego, which is also the date that marks the beginning of California as an integral part of the civilized world. California was discovered in the year 1542, only fifty years after Columbus had discovered the New World, but it was not until July 1, 1769, that the Franciscan Padres came to San Diego bearing with them the Cross of Christianity and the stakes of the white man's civilization. On July 16, 1769, the Mission San Diego was founded—the first of that marvelous line of Mission Hospices that were builded along El Camino Real, the 'King's Highway' between San Diego and Sonoma, a distance of 700 miles, the remains of which now constitute the only historical ruins of any extent existing within the borders of the United States.

"It was fitting and entirely consistent, therefore, that the ground breaking for San Diego's Exposition which is to celebrate the completion of the Panama Canal, should be held in the month of July, the month of the first miracle performed one hundred and forty-two years before on the same spot, under the same blue sky and on the shores of the same bright Harbor of the Sun. And it was no wonder that the people gathered from far and near by the thousands and hundreds of thousands to witness an event at once so stirring and fascinating, appealing as it did to the imagination of even the dullest beholder.

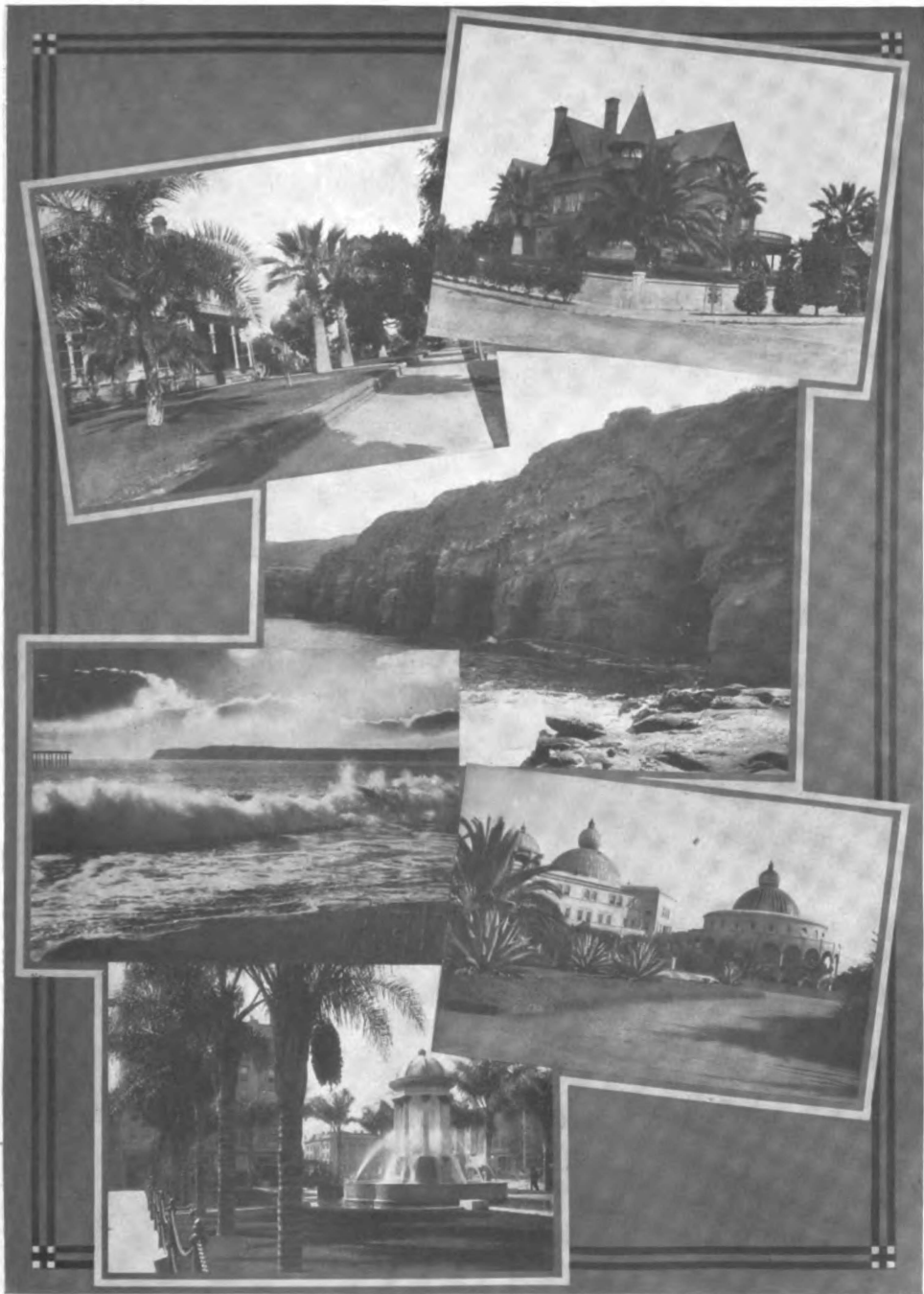
"The first act which the first white men who settled in California performed was the celebration of a military mass on the shores of San Diego bay. It was done by the Franciscan Fathers, assisted by the Spanish military forces which accompanied the expedition from Old Mexico.

"In order, then, to preserve the atmosphere of history, the Exposition ground breaking began also with the celebration of a military mass celebrated by Franciscan Fathers on the same historic spot. Thus was the pendulum of history swung backward across the dusty pathways of nearly a century and a half of time on the morning of July 19, 1911, in San Diego.

"On the shores of the Harbor of the Sun the same Te Deum was sung that Junipero Serra chanted when he came up from La Paz with Don Gaspar de Portola, footsore and weary, but with a heart bursting with joy as he plucked a wild rose from its stem and said: 'This is a beautiful land. The roses are like the roses of Castile.'

"From far away Santa Barbara, San Luis Rey, and the still more distant missions of the Sierra came, cowled and sandaled, the brown priests of St. Francis. In the heart of the hills that overlook the Sunset Sea and the purpled isles of the Coronados they reared an altar hard by the old Presidio Hill on which Father Serra had builded the first Christian shrine ever erected on these western shores. Not far away they could see the ruined towers and crumbled walls of the ancient Mission of San Diego de Alcala which signalized the first victory of civilization over heathenism in California. Almost at their feet trickled the waters of the first irrigation ditch ever made by white men within the borders of the United States, as at present constituted. Down in the quiet, peaceful Mission Valley stretched the sacred fields where was shed the blood of California's first martyr.

"The celebration of the Solemn Pontifical Military Field Mass was a most entrancing and colorful spectacle. It was carried out with not only all the pre-



Private Grounds of T. T. Hillman
Surf at Coronado
Wilde Electric Fountain in Plaza

Residence of U. S. Grant, Jr.
Caves at La Jolla, near San Diego
Theosophical Homestead

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cision of military discipline, but also with the perfect organization of the Roman liturgy. The swing of the centuries was behind it.

"The magnificent altar, set in a natural amphitheater with the blue sky for its dome, was an exact replica of an old altar of Loreto. An immense painting of Our Lady of Carmel formed the background. The floors were of spotless white and the enclosures were of Roman pillars adorned with gorgeous wild flowers and cut roses from the magic gardens of San Diego.

"Twenty-five thousand people were gathered on the open hillsides as the procession of acolytes, friars, secular clergy, distinguished guests, the Bishop and the military filed across the new made trails down to the altar. A hush fell upon the multitudes for a moment; they then broke into a deep murmur of admiration that sounded like the tones of some mighty organ.

"Franciscan priests were in full charge of the mass, the celebrant being Father Benedict, Provincial of the Order, who came from St. Louis for the occasion. Rt. Rev. Thomas James Conaty, Bishop of Monterey and Los Angeles, occupied a purple throne. Fully one hundred clergymen attended him. Within the sanctuary were seated Hon. John Barrett, representing the president of the United States, and Joseph W. Sefton, representing the director-general of the Exposition, recipients of the most unusual honors to non-Catholics.

"After the bugles of the troopers ceased to ring their wild music across the sun swept hills, the band played 'Nearer my God to Thee,' and then the stately bishop in his resplendent vestments arose in Cappa Magna and delivered the historical address of the day. It was a notable oratorical effort and was received with cheer after cheer by the people present, who represented all shades of religious belief.

"The actual ground breaking ceremonies took place in the same spot where the Military Field Mass had been celebrated. The program began in the early afternoon in the presence of another monster throng of people.

"When the procession arrived at the site selected for the future exposition buildings, U. S. Grant, Jr. introduced Rev. Edward F. Hallenbeck, pastor of the First Presbyterian church, who delivered an invocation. This was followed by the exposition ode, '1915,' sung by a triple quartette. Mr. Grant then presented Joseph W. Sefton, Jr., acting director-general, as master of ceremonies. Mr. Sefton made a short welcoming speech and introduced Acting Mayor P. E. Woods. The latter in turn presented Lee C. Gates, the representative of Governor Johnson. Mr. Gates spoke eloquently of the glories of California. Hon. John Barrett, as the representative of President Taft, made a brief address.

"Then came the actual ground breaking. Mr. Sefton first loosened the earth with a silver pick. He then handed a silver spade to Mr. Barrett, and the latter turned the first sod. The spade was then passed in succession to Mr. Grant, Acting Mayor Wood, Mr. Gates, President Charles Moore of the Panama-Pacific Exposition, John D. Spreckels, Governor Richard E. Sloan of Arizona, Will H. Parry, representing the governor of Washington, and to several prominent San Diego citizens. Each turned a spadeful of earth, the implement being finally passed back to Mr. Sefton, who turned the last sod.

"Mr. Barrett again addressed the gathering, this time in behalf of the Pan-American republics. Then followed the unfurling of the American flag to the strains of the 'Star Spangled Banner.' Next the President's flag was broken out

amid a great cheering, the release being effected by President Taft touching an electric button at the White House. The band greeted the President's flag with 'Hail Columbia.'

"Flags of the southern republics were next thrown to the breeze as the band played a medley of the airs of all nations.

"G. Aubrey Davidson spoke on 'The Inauguration of the Panama-California Exposition.' He was followed by Charles C. Moore, whose theme was 'San Francisco and Her Great World's Fair.'

"Several San Diego gentlemen followed with remarks. The band played a medley of national airs and the ground breaking ceremonies were ended.

"During his address Mr. Barrett read the following letter from the president of the United States:

'THE WHITE HOUSE, WASHINGTON,

July 11, 1911.

'MY DEAR MR. BARRETT: I have yours of July 11, in which you advise me that in response to an invitation to you as director-general of the Pan-American Union you are going to the ground breaking ceremony of the Panama-California Exposition, to be held in San Diego from January 1 to December 31, 1915. This ceremony, I believe, is to take place from the 19th to the 22d of the present month.

'I beg that you will acknowledge for me the courtesy of the management in having extended an invitation to me to attend this ceremony. I cannot myself be present, but I should be very glad to have you represent me there and make appropriate remarks on the occasion.

'San Diego is so situated that she is necessarily very much interested in the opening of the Panama Canal, and the fact that this exposition is to give particular attention to the relations between this country and Central and South American countries is sufficient reason why the American public should be especially interested in its success.

'You will convey my compliments to the managers and to the people of San Diego and say to them what you know of my interest in our Central and South American relations and in the usefulness and successful issue of the exposition.

'Sincerely yours,

'WILLIAM H. TAFT.

'HON. JOHN BARRETT, DIRECTOR-GENERAL, PAN-AMERICAN UNION.

'P. S.—I know San Diego because I have been there twice, my father and mother and sister lived there for years, and my father died there. I appreciate the singular beauty of its situation and the wonderful character of its climate. And all these circumstances give me a personal interest in promoting its welfare and in helping to assure the success of an enterprise like this. W. H. T.'

"On the evening of the first day of the celebration the long looked for arrival of 'King Cabrillo' and the crowning of 'Queen Ramona' nearly approached the dignity of pageantry although conceived wholly in a spirit of pleasantry. The light on the waters of the bay and the costumes of the queen and her ladies in waiting were quite gorgeous.

"The affair was handled with admirable care and success. A Spanish caravel

was seen to come across the waters of the harbor just at sunset. As the ancient vessel slowly crept from North Island toward the pier in San Diego the tremendous throngs on shore seemed to grow excited. Lights flashed out from all kinds of craft in the harbor—here, there and everywhere. The caravel sailed on and on and at length reached the shore.

"In the prow of the ship a strange figure appeared who announced that he was Juan Rodriguez Cabrillo, the discoverer of California, and that he had returned to revisit the scene of his exploits in the year 1542, when he first came to San Diego. Cabrillo seemed to doubt that the magnificent city he saw before him could possibly be the San Diego of old. He was assured that it was the identical spot and he was urged to come ashore and accept the freedom of the city which he had put on the map nearly four hundred years ago. A golden key to the city's gates was placed in the old sailor's hands and he was told that the people were eager to declare him king in preference to Colonel Collier or anybody else.

"His welcome seemed so genuine that Cabrillo was delighted, and he stepped ashore, whereupon he was placed in a sedan chair and borne by a band of Indian carriers up the main street of the town until the courthouse was reached. There at the doorway of the temple of justice, he found Queen Ramona sitting on a golden throne. The mob wildly demanded that Cabrillo should crown the queen. The immortal navigator gladly complied, performing the ceremony with all the traditional chivalry of his nation.

"Ten thousand people then swept both Cabrillo and Ramona before them to 'The Isthmus,' which was a wonderful place similar to the Pike at St. Louis or the Midway at Chicago. There were endless noises from countless horns and a din that would raise the padres from their graves in the Old Mission churchyard.

"The Queen, who in private life is Miss Helene Richards, of Point Loma, was chosen for her exalted position by vote of the people, her popularity out-running all rivals. Tall, and possessed of a brunette beauty, she graced her position and became the most acclaimed personage of the carnival. Wherever she went she was greeted with salvos of cheers. Prominent ladies and gentlemen of San Diego formed Her Majesty's court and did much to make it the striking success that it was.

"On the morning of the second day there was a most beautiful floral parade. At night came the Historical Pageant, the object of which was to impress upon the people the march of time in the magnificent southwest, the land of sunshine, of wastes redeemed by living waters from immemorial deserts; and to pay tribute to the ancient art and skill in engineering which not only the Franciscan Padres displayed nearly a century and a half ago, but also to acknowledge the greatness of the old Aztecs, who made the southwest their place of dwelling longer ago than the memory of man.

"The idea of the poet who conceived the pageant was to carry the people in imagination out of the mists of forgotten times, along the fateful pathway of the centuries down to yesterday with a glimpse of the vistas of tomorrow.

"What the poet dreamed, the consummate skill of the artist carried out. To Edwin H. Clough, the poet, and to Henry Kabierske, the artist, let the praise be given.

"The first float in the pageant represented a group of ancient Aztec priests sacrificing the god of war. To make this representation faithful Mr. Clough drew upon all his vast knowledge of Aztec history and tradition as well as the mind of man can conceive it. We saw the priests of that wonderful civilization, which was as old as Egypt. As the picture went slowly through the streets, the dullest imagination could not but feel the glamour of another day that faded long before the Atlantic shores of America knew the white man's footsteps.

"Next came Balboa taking possession of the Pacific for the King of Spain. It was all as innumerable American boys have seen it in history and geography from the childhood of Benjamin Franklin to the present hour. There stood the great conquistadore in helmet and coat of mail, knee deep in the waters of the mother of all the oceans, the banner of Castile in one hand and his sword in the other, as he shouted to wind and wave that all the vast expanse of billows before him was then and should forever be vassal to the monarch whose golden throne bore the arms of Castilian power.

"Then came the next step in the tragedy of the years that saw the fall of Aztec dynasties and the rise of Christian rule. The tableau showed Montezuma in the dust and Cortez, the grim Spanish conqueror, standing triumphantly over him. About the fallen king were his dead warriors, who had once beaten Spain back and whose prowess and valor had sent Cortez weeping under the yew tree on that black night of his bitter defeat. But the Aztecs were doomed to go down at last. Spain was not long to be balked. The picture brought out very vividly the terrible page in history which it was designed to delineate. Following the conquest of Mexico history tells the thrilling story of the search for the famed seven cities of Cibola. Cortez was the most eager man of his time to find those cities, which were said to be built of gold.

"Faithful to the chronicle, the fourth float in the pageant portrayed Cortez directing Juan Roderiguez Cabrillo to sail northward upon the unknown seas in search of Cibola. The portrayal was one of the most striking in the procession, with the conqueror pointing to the vague distance and Cabrillo, the intrepid mariner, eagerly expressing his desire to go on that immortal voyage which resulted, not in the finding of the seven golden cities, but in the discovery of the golden land of California.

"The fifth float was the Caravel of Cabrillo. It was very beautiful, the little ship with its joyous sails that came up the coast of glory so long ago, passing into San Diego's harbor of the sun, then on to San Pedro, to Santa Barbara and as far as the windy headland of Mendocino, whence it doubled back to leave the great admiral in his last sleep in the warm heart of the land he found.

"Now appeared in the splendid pageantry the era of the Brown Padres who built the old California missions along the sunny stretches of El Camino Real from San Diego to Sonoma, in the Valley of the Seven Moons. The tableau showed Junipero Serra planting the cross on the shores of San Diego Bay. Surrounding the heroic figure of the old Franciscan were wondering, half-naked savages, Catalanian soldiers, the Gubernado, Don Gaspar de Portola, the neophytes from Mexico, the muleteers, and other actors in that fateful drama of July 1, 1769.

"The ninth float was one that sent the greatest thrill through the miles of spectators who lined the streets of the city. It was the tableau of the raising of

the first American flag in San Diego, which was, as some authorities contend, the first American flag to be raised on the Pacific coast. There is a tradition that a man in San Diego was in advance of Sloat at Monterey in planting Old Glory on California soil, although his flag was a necessarily crude production, seeing that he manufactured it out of his own red and white underwear. The pageant ignored this prosaic legend and showed a much more poetic transaction, which was greeted with tremendous outbursts of cheers all along the line.

"A very beautiful tableau was presented by the float which had an allegorical representation of Neptune presiding at the wedding of the Atlantic and Pacific oceans, thus typifying the completion of the Panama Canal.

"The last and most elaborate float in the pageant told the story of San Diego from its first discovery by Cabrillo down to the present day, including of course, the intermediate epoch of the founding of the first mission by the Franciscans. This float, in its fascinating beauty of light and color, can be called nothing less than a masterpiece of stage ingenuity. Here the poet and the artist reached a climax. No indoor stage could have possibly done this conception justice. It needed the open highway and that was what it had. David Belasco would have gained something in craftsmanship had he been in San Diego.

"The third day was given over to a fine industrial parade which was greatly enjoyed by the crowds. Then on the morning of the fourth and last day of the celebration came the event for which the people had so eagerly looked forward. It was the Pageant of the Missions.

"There is no appeal to equal the appeal that the old Franciscan Missions make to the people of California, the whole southwest and, indeed, the whole country. The ruins of the ancient establishments are strewn along the old King's Highway, which was the celebrated 'El Camino Real,' or Royal Road, of the glorious days of the Spanish era.

"The spectacle presented was without doubt the most successful attempt at pageantry ever made in America. There were twenty-one floats, each representing a mission, beginning with the Mission San Diego de Alcalá, which was the first mission and ending with the Mission San Francisco de Solano, which was the last.

"The pageant represented a stretch of more than a half century of time as to the life of the missions; that is to say, from the building of the hospice at San Diego in 1769 to the building of the Sonoma Mission in 1822. It also represented the entire length of the King's Highway, seven hundred miles from San Diego's Harbor of the Sun to Sonoma's Valley of the Seven Moons.

"There were nearly one thousand living characters in the procession who represented monks, soldiers, knights, Indians and all the historical associations that surround not only the legends of the founding of the missions, but their actual establishment, as well.

"For instance, the float representing the Mission San Juan Capistrano showed the warrior priest as he was in the distant centuries in which he lived. Characters to represent that era were brought forth. In addition to these there were characters to represent the time the mission was actually founded in California. There were hundreds of monks, trudging along on foot, hundreds of outriders and hundreds more Indians, soldiers and attendants.

"As the long, glorious procession came up the sunny street a deep hush fell

upon the people who numbered a hundred thousand and made the biggest crowd that San Diego had ever entertained at any one time in her history. The pageant's slow and solemn movement created the right atmosphere. It seemed as though the people were in attendance upon a religious ceremony, which it really was. Not a carnival horn was blown, not a noisy bell jangled.

"Back again from the mists and memories of the well loved past came the brown robed padres so dear to the soul of California. Back came the days when a man could travel from San Diego to Sonoma and stop every night at a mission whose doors swung open to him without price.

"The replicas of the old ruins were faithfully portrayed by Mr. Sibierske who had charge of the pageant under the direction of the Historical and Industrial Pageant Corporation of Philadelphia. This master artist here accomplished the crowning achievement of his career. He walked at the end of the procession and was greeted with hearty cheers by the assembled multitudes.

"All in all, the ground breaking celebration here described was a splendid augury of the success with which San Diego will carry out the California-Panama Exposition of 1915. The pageantry and the carnival gave us a foretaste of what we shall see and hear when the trails of all the world lead to the Harbor of the Sun, less than four years hence, and the show shall be in full swing on these bright and luring shores."

Steadily forward has been the movement of the forces engaged in preparing for the record that is to be written in San Diego in 1915 in celebration of the formal opening of the Panama canal. There has been no cessation of activities, nor even a slackening of the steady forward movement with which the preparatory work of the exposition has been prosecuted. The work of the year has been that of laying the foundation of the great project, making smooth the rough spots and paving the way for the greater building work that is to mark the year 1913.

To plan and execute a mammoth project requires time and care and the constant vigilance and earnest application of a force working in harmony throughout every department. So much of the ultimate success of an enterprise depends upon the care with which the ground work is constructed that the year just closed has been one of unusual importance to the exposition management, and yet there has been in the year such a condition of harmony and such hearty cooperation throughout the construction forces that the exposition officials feel that the work of the year has been well done and that a substantial basis has been established for the work yet to be done.

It has been written that "All roads lead to Rome." The simile may be found in that the roads traveled by all departments of the exposition work have had a common center and now, at the end of the year, it is found that all have served to work to a common purpose. As in the weaving of a blanket the warp and woof cross and recross, in the end producing one great whole, so have the diversified threads of effort at the exposition ground, interlaced, been vitalized and now, at the beginning of the year of greater construction, give assured promise of the fulfillment of the magnificent plans of ultimate decoration and arrangement.

The progress of the year at the exposition is written in letters large. The first notable work was the completion of the administration building at the eastern approach to the Canyon de Cabrillo, where are housed the departments and

from which are directed all the works on the grounds. As the scope of these works widened the departmental forces were enlarged until now the administration building is a hive of humanity. Each department has found multiplied details of labors to accomplish, but these have been met with vigor and the departments are well organized as a result of the year's activities.

Other buildings that will have permanent place during the exposition have been erected during the year. The first of these to be constructed was the service building, where are houses for the horses and wagons used in exposition construction work, and where are stored all the construction supplies purchased in large quantities. This building, while serving a utilitarian purpose only, is of mission style of architecture. This building is the distributing point for all jobs on the grounds. When its present use is terminated the structure will become the headquarters of the exposition street cleaning department and an emergency repair station, this continuing throughout the exposition year.

The new years will bring thriving activities in building construction at the exposition, and this work is certain to be attended by accidents. Little of the work done in 1912 has involved workmen in danger, but, meeting the demand that must arise later, the exposition management prepared and opened on December 15th an emergency hospital. This building carries of course the mission style of architecture. It is in charge of Dr. C. L. Caven as medical director.

Of more than passing interest is the exposition hospital. It will serve in all cases of accidents to employes of the exposition company from the date of its opening to the close of the exposition, and also all emergency cases requiring surgical or medical treatment arising on the exposition grounds during the exposition period. The operating room is equipped as completely as that of any other hospital on the Pacific coast, and every article installed is of the latest design and finest construction. Nowhere can be found better apparatus. Furniture, chairs, sterilizers, operating tables, etc., represent the most advanced ideas in such equipment for hospital service. Dr. Caven has at his command a corps of highly trained and competent nurses. A great manufacturing company has contributed the entire equipment of the hospital to the exposition free of charge, even paying the freight on the shipment to the exposition site. This equipment is loaned to the exposition and is to be returned to the manufacturing company at the close of the exhibition, at the contributor's expense. The hospital is equipped to care for twenty-six patients.

Extreme good fortune has attended the work on the exposition grounds during the year. Many tons of dynamite have been used in blasting for drives and in grading building sites, and yet there has not been one instance of injury to any employe necessitating surgical attention.

There will be no unsightly fences about the exposition grounds. These, embracing six hundred and fifteen acres in the center of Balboa park, will be enclosed by a fence, strong and durable, but this will be a solid wall of green. One-half of this fence has been erected during the year and it will be completed early in 1913. Immediately after its completion, vines will be planted at the base and these will have two years of growth prior to the opening of the exposition. This work was given attention early in the construction period that the overgrowing vines might be planted at a time to insure development by the opening date. This fence skirts the Canyon de Cabrillo.

Horticultural activities have progressed splendidly at the exposition nurseries during the year. An addition was made to the smaller lath house where thousands of specimens of hundreds of varieties of trees and shrubs are being developed for transplanting, and another lath house, much larger, has been erected to shelter a larger stock of these growths. At this time the nurseries at the exposition contain about one and one-half million specimens of horticultural production, and while fifty thousands of trees have been planted during the year, many other thousands will be placed during 1913, while the exposition display stock will be nurtured and brought to full stature in endless variety well in advance of the opening.

Grading work on the streets and boulevards is eighty-five per cent completed at this time. Following a well defined plan of progression in building the exposition, the management has cared for this essential feature before beginning the construction of exhibition structures. All the grading around the building sites, the platting of walks, etc., has been finished. Much of this work has been difficult, requiring the use of dynamite in blasting away the hardpan of red disseminated limestone found beneath the soil, and forming a building foundation endurable through the ages. This stone, also, when broken, constitutes a natural base for the asphalt surface of the walks and drives and eliminates the cost of constructing the ordinary macadam foundation. This favorable condition will be of vast importance in expense saving and time when the work of surfacing the drives is reached after the buildings are completed.

In addition to these things, the foundation has been placed for the southern counties building, this being located near the eastern entrance to the grounds at the terminal of Midland drive, and due east of the administration building. This building will be finished early in 1913. Three separate plantations are provided for the displays of the southern counties and two of these have been planted and these ought to be in bearing by September, 1913. These plantations include oranges, lemons and grape fruit.

Substantial progress has been made on the construction of the great bridge that is to span Cabrillo canyon, with its western end at the Laurel street entrance on West Park boulevard, its eastern end at the administration building and squarely in the acreage devoted to sites for exposition buildings. This massive bridge, 900 feet long, 120 feet high and 40 feet wide, a reproduction in design of a famous bridge in Spain, and spanning a lake, is taking shape rapidly. The eastern approach is nearly completed, the foundations for the arches have been placed in the lake and on the eastern and western slopes of the canyon, and concrete is being poured into the forms of the eastern arch of the structure.

The Laguna de Cabrillo is completed. An earth dam has been constructed, with a concrete spillway, and a concrete outlet and this reservoir is ready for the water which will not be turned in until the big bridge is completed.

Road work outside the exposition grounds and in the park has been advanced greatly during the year. While the rough grading inside the grounds is eighty-five per cent completed, including the Plaza de California, the Prado, the Plaza de Panama, the Water Cascade, the Terrace, the Plaza Internationale, the Avenidas Internationale, the Calle Cristobal, the Calle Colon and the Isthmus thoroughfares outside the grounds have been brought to a high state of perfection. The West Park boulevard has been relocated and resurfaced and a complete fill

made from the western entrance at Laurel street to the western approach to the bridge. Midland drive from the western entrance to the grounds at Russ high school has been relocated and resurfaced. The drive through the Canyon de Cabrillo, beneath the great bridge and crossing the lagoon, with its branching paths leading to different parts of the park, has been regraded and its steeper ascents eliminated. Along this drive hundreds of quail rise from the road with roar of wings to fly a few yards and again settle to watch the passerby. Here, too, rabbits skurry aside and turn to watch with sober eyes the noisy truck or silent car, and here hundreds of song birds flit from tree to tree and send forth their cheering notes of welcome to the visitors, secure in the long protection that has been afforded them within the park confines.

One of the busy structures on the exposition grounds is the mill. This was erected in conjunction with the erection of the great bridge spanning the canyon. While a rule of the exposition management is that no needed expense shall be spared in prosecuting the work, economy consistent with this rule is practiced and the erection and operation of the mill has proved economical of time and money.

In the construction of the bridge hundreds of wooden forms are used as molds for concrete, and to have these made elsewhere on specifications would have entailed delays in construction that would be costly in the extreme. The problem presented was solved quickly by the commissioners of buildings, who established the exposition mill, thoroughly equipped with the most modern high speed machinery for wood-working. This mill is provided with one machine for running shiplap, flooring, sizing timbers, beams, etc., having a capacity of 6,500 feet, board measure, daily. In addition there are humming cross cut and rip saws that turn out with rapidity the lumber demanded by the workmen in construction work, and a big band saw that is kept singing almost constantly turning out scroll patterns for ornamental decorations as the designs are prepared by the men with the drafting board. Another machine quickly bores timbers for joints, and the plant is made complete by a saw filing and grinding equipment. Emery wheels, grindstones and forges, power driven, are utilized to keep the tools of the workmen in the best of condition, axes, chisels, drills, shovels and all other individual equipment of the workingman being maintained in the highest state of usefulness at all times, and thereby increasing the effectiveness of the individual unit, which has proven during the year to be a mighty factor in the exceptional advancement of the work of building.

During 1912 the record of tree and shrub planting on the exposition grounds has kept pace with that made by the men with the teams, the pick and shovel, and the annual report from the landscape gardeners shows that over fifty thousand trees and shrubs have been placed. It may appear that this is a large number, but this work has only begun and the record for the year constitutes only a small part of that outlined, and which must be done to realize the plan of the exposition.

The fast growing eucalyptus has been utilized for decorative purposes and out of this planting has come a better knowledge of the tree. On the exposition grounds today are trees of this variety that are showing sturdy growth and vigor that were transplanted when sixteen months of age, and their stamina and

development has exploded an old and firmly grounded idea that a eucalyptus could not be transplanted successfully after one year.

The visitors to the exposition now probably would doubt that the little sprouts of trees clustered on the sides of the ravines and canyons would be aught than shrubs by 1915, but startling promise of what these will be in two years is found in a number of trees near the administration building that were little bushes a few months ago, and which now lift their leafy tops high in the air. Trees will make the exposition grounds a bower of green beauty by 1915, and in the record of fifty thousand trees and shrubs planted in 1912 and the million and a half specimens of all kinds in the nurseries yet to be placed about the grounds or used for display purposes during the exposition is found the glowing promise that the Panama-California exposition will be resplendent in a swathing of emerald, everywhere, and high and low.

The mill on the grounds has been used to splendid advantage in connection with the nurseries. At the beginning of 1912 the nursery stock was a few hundred thousand. Now these wonderful houses of lath contain over a million and a half plants in pots and boxes, ranging in size from a pot two inches in diameter to a box four feet square. The mill during the year turned out thirty-five thousand of these boxes, with a range of size from one foot to four feet square. Nursing the stock in these boxes secures the greatest possible growth and every expedient is being used, even before the beginning of building construction, to insure the entire success of the horticultural features of the exposition.

Not the least of the accomplishments of the year by the exposition management is the provision made for the employes on the grounds. A large restaurant has been constructed, with neat bunk houses, where employes may obtain meals and lodging at extremely reasonable rates. The exposition management desired first of all to secure a force of workingmen who would remain "on the job." A shifting force means loss of efficiency in the organization and loss of efficiency means increased cost. To gather and retain a large staff of workingmen, weld them into an organization capable of the greatest accomplishment, and yet to make conditions such that they would be contented, was a problem to which the department of works devoted attention early in the year—and the problem was solved.

Provision was made for the housing of four hundred workingmen. In the plan adopted is a radical departure from the ordinary bunk house, with hundreds of bunks in tiers, sheltering a heterogeneous company of all sorts and conditions, temperaments and inclinations, and indifferent cleanliness. The exposition company constructed small bunk houses, each containing four bunks only, light, airy, comfortable and clean. This plan is capable of quick expansion and as the working force is increased as the exposition work progresses, provision will be made for others as the demand arises.

Then the exposition management provided a large restaurant, as light and airy and as clean as the little bunk houses. Here the large body of workmen employed on the grounds take their meals, and for this service and the use of the bunk houses the rates are made barely sufficient to maintain these appreciated adjuncts. There was no desire to convert this service into a profit, and the rates have been made extremely satisfactory to the workingmen. The result

has been the securing and retention of a crew of workingmen who might find it convenient to move on to other work were conditions not entirely to their liking. To the retention of this contented force, individually acquainted with the work, is attributed much of the success that has attended the preliminary construction work of 1912.