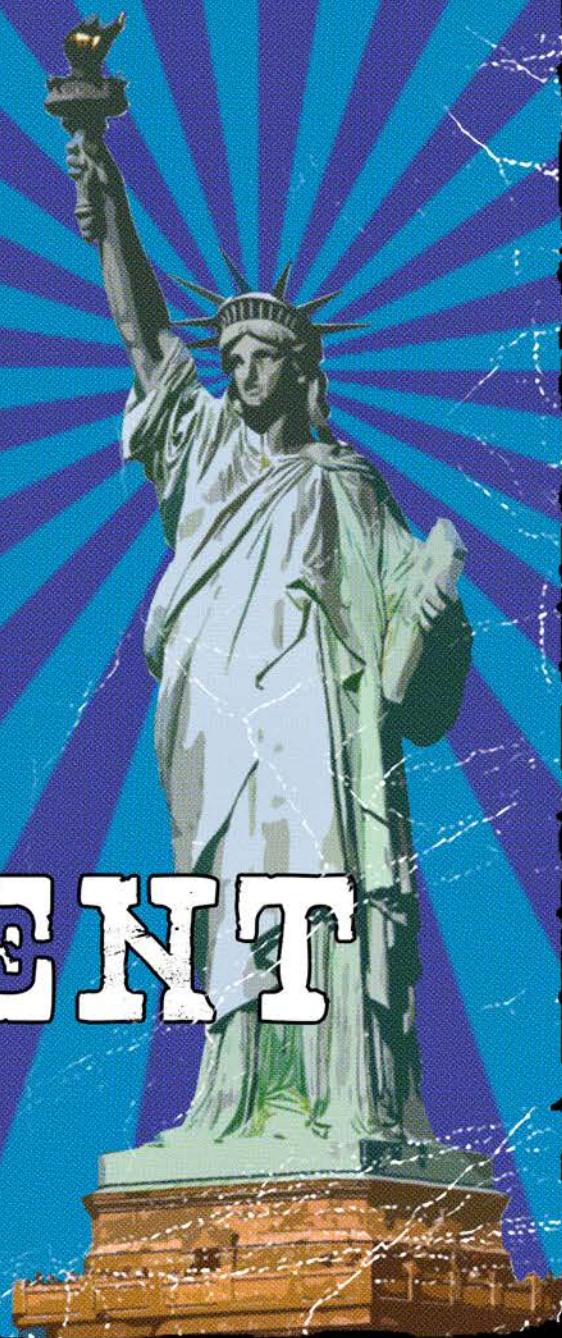


RICHARD HALLIBURTON'S BOOK OF

MARVELS

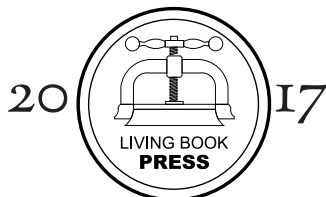


THE OCCIDENT

Richard Halliburton's

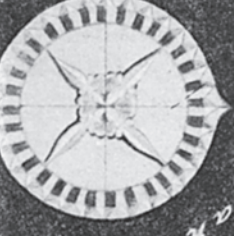
BOOK OF MARVELS

The Occident



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Pacific Ocean

Mexico

Gulf of Mexico

Canada

MEXICO CITY
 POCATEPETL
 VERACRUZ
 CHICHEN ITZA
 YUCATEC
 FLORIDA
 FORT JEFFERSON
 KEY WEST
 HAVANA
 CUBA
 CHRISTOPHE'S CASTLE

MAP showing location of Marvels in the UNITED STATES and the route we follow to visit them.

1. San Francisco Bay Bridge
2. Golden Gate Bridge
3. Yosemite
4. Grand Canyon
5. Boulder Dam
6. Niagara
7. New York
8. Washington DC.
9. Fort Jefferson



THE OCCIDENT

CHAPTER I

A MARVELOUS BRIDGE

Where shall we start?

I'm writing this book in a house on the top of a high hill in San Francisco. From my window I can see the two biggest bridges in the world—one red, one silver—stretching across the beautiful bay below. Why not start right here, on our journey across the world in quest of its marvels? For surely these bridges are among the most marvelous achievements in human history.

The silver bridge leads eastward across the bay to link San Francisco with the cities on the opposite shore. The bay here is five miles¹ wide. But to this five miles of bridge over the water, the approaches over the land at both ends add another three². So from end to end this giant among bridges measures eight miles³ long. This is four times the length of the famous George Washington Bridge across the Hudson River at New York (which, previously, was the greatest in the world), and seven times the length of the historic Brooklyn Bridge.

Have you ever walked eight miles? Were you tired? How long did it take? Unless you walked very fast it took perhaps three hours. Now imagine walking and walking and walking for three hours—all on the same enormous bridge. And for three of the miles the roadway is two hundred feet⁴ and more above the water. If you have a sixteen-story skyscraper in your town, and if you have been on the roof and looked over the edge, you will know how far the roadway is above the waves.

As you will see from a look at the picture, this Bay Bridge is made in two sections not at all alike. One section leads from San Francisco to a small island in the middle of the harbor, while the second section leads from the island to the eastern shore. The roadway of the first half is held

1. 8km
2. 5km

3. 13km
4. 6km

up by two great steel cables which have been stretched out over the tops of steel towers that reach as high as fifty-story buildings. These cables are just like sagging tight-ropes on which you've seen circus acrobats dance—only a thousand times bigger. Hanging straight down from these tight-ropes are hundreds of smaller ropes, also of steel. And from the down-hanging ends of these, the roadway is suspended, high in the air. This road is a double-decker, one level above for automobiles, and one below for trains and trucks.

The second section, leading from the island to the eastern shore, mostly over shallow water, is built like an ordinary steel railroad bridge.

You would think that such a colossal framework, weighing thousands and thousands of tons, would be stiff and too firm to be moved. But this is not true—especially of the suspension part. Here, the monster cables, steel though they are, swing in the breeze like any other rope. If we cross this part of the bridge during a high wind, we can feel the roadway, crowded with trucks and automobiles and electric trains, very gently rising and falling.

So huge is this bridge, and so wide the bay it spans, engineers say it may remain the biggest in the world for a thousand years to come, for no larger body of water exists where the traffic is likely, within that time, to make necessary a greater effort.⁵

Now that I've told you about the Bay Bridge, we shall cross over it ourselves. We'll have to go by automobile, as eight miles would take too long to walk. The sloping approach itself is over a mile⁶ in length, because it has to climb from the streets of San Francisco to the bridge floor, two hundred feet⁷ above.

5. *The longest bridge currently is shared by the Lake Pontchartrain Causeway, Louisiana, and the Jiaozhou Bay Bridge in China.*

6. 1.6km

7. 61m

San Francisco and its famous bay taken from an airplane at 16,000 feet. This picture shows clearly the location of the city's two wonder-bridges. The right-hand one, divided by the island, is the Bay Bridge. It stretches eight miles from San Francisco to Oakland, the city in the upper right corner. The part of the bridge suspended from cables—the part reaching from San Francisco to the island—is two miles long. On the other side of the picture is the Golden Gate Bridge, soaring across the mile-wide entrance to the bay. The span of this bridge—over 4000 feet—is by far the greatest in the world. At the lower left corner the Pacific Ocean breaks in white waves upon the beach. Golden Gate Park lies in a long black strip across the city.



We start up. Our rising concrete road soars above great warehouses and docks and churches. Now we're higher than most of the skyscrapers and can look down upon them. How tiny the people appear to be on the streets below!

Now we're on the bridge itself, and over the Bay. White ferry boats sail far below us, and a big freight boat. If we had an apple we could toss it down the freighter's smoke-stack to the stokers.

Notice the steel cables, side by side, from which our roadway hangs. Each one is over two feet⁸ thick (Can you imagine a steel rope *two feet thick?*), and contains seventeen thousand strands of wire. Each wire is as big as a pencil and will lift our automobile and all of us in it, and not break. Just one foot-length of these big cables weighs two thousand pounds⁹. But they *have* to be strong, for they must hold up millions and millions of pounds. At a crowded hour there may be as many as three thousand automobiles, five hundred trucks, and two dozen electric trains, all rushing across the suspended part of the bridge at once, and all weighing down the two cables. Yet all this traffic put together does not weigh even one-tenth as much as the two steel and concrete roadways over which the traffic moves.

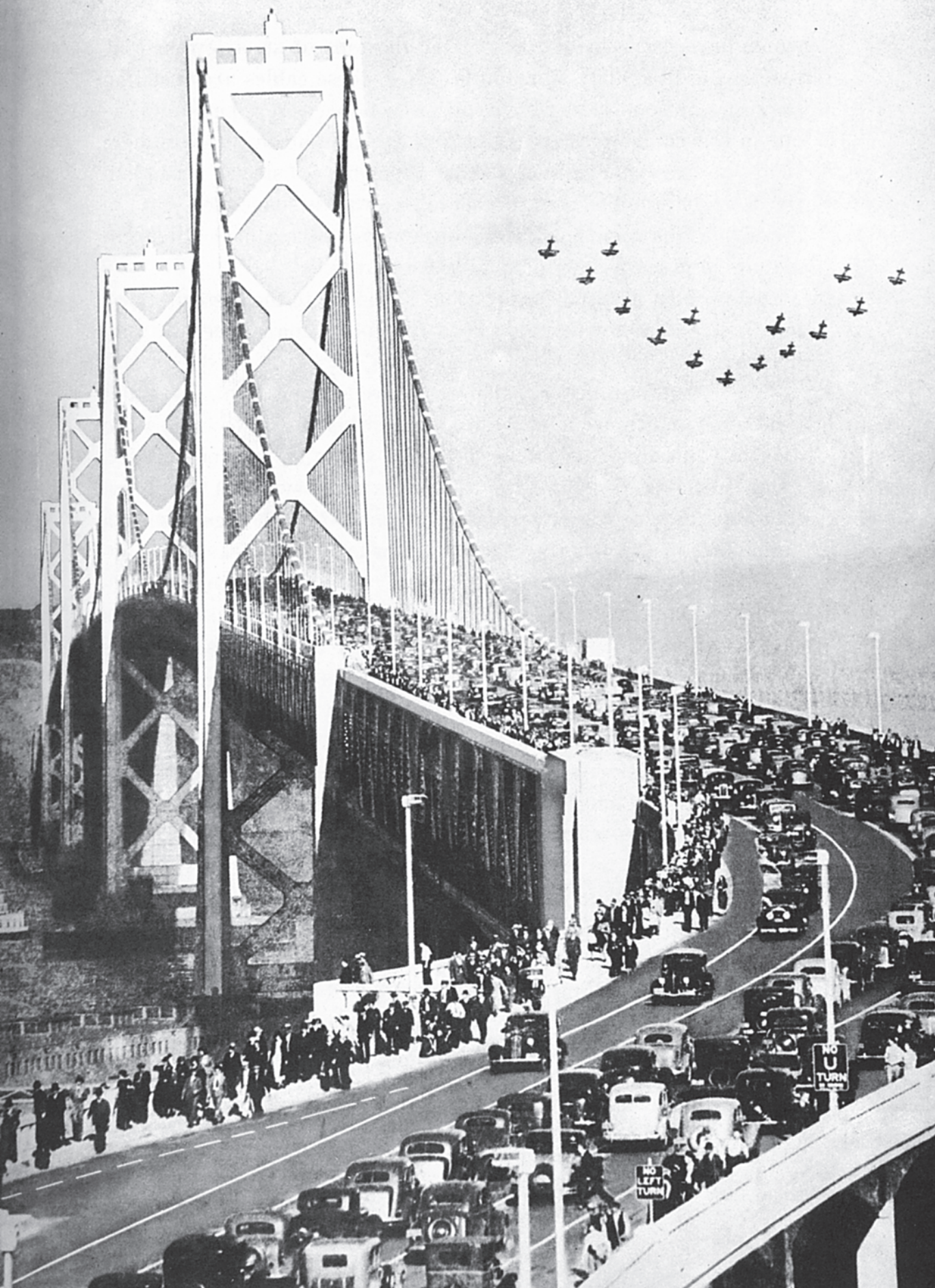
And now we have come to the first of the giant towers on the tops of which the cables rest, and through which our roadway runs. These towers, four in all, stand upon concrete piers that go down 240 feet¹⁰ below the surface of the water. These piers themselves are taller than the average New York office building. Such a vast undertaking, where brave men had to work so far down in the water and so high above it, was not finished without a tragic loss of life. In all, twenty-four workmen were killed, some by dynamite explosions deep in the rock foundations, some by falling from the towers or the roadway into the bay. And every time a workman perished, all work was stopped for the rest of that day. So on twenty-four days, during the construction of the bridge, work stood still, as a sign of respect to the twenty-four victims.

8. 60cm

10. 73m

9. A 30cm length weighs 900kg.

The Bay Bridge on a busy day. The roadway shown here is for passenger automobiles only. Below, on the lower deck, is the roadway for trucks and electric trains. The top deck is 200 feet above the water. The great concrete pier, supporting the center of the bridge, is a mile away.





One morning when the bridge was half completed I was being led across it by an engineer. Suddenly word began to pass along from workman to workman that one of their fellows had just fallen to his death. "That makes the twentieth," somebody said. Without a word all the two thousand bridge-workers put down their tools, and walked in silent lines to the shore, and home.

We have now traveled two miles¹¹ along this mighty swinging roadway, and come to what seems the end of it—to the far shore. But it's not the far shore—we're not yet in the middle of the bay. It's a rocky island called Yerba Buena [YAIR-bah BWAY-nah], and right through it, through the widest tunnel in the world, still nearly two hundred feet¹² above the water, the double-decker roadway passes.

This isn't a long tunnel, only about six hundred feet¹³. But it's so high and wide that a six-story building could be pulled through it and have room to spare. All this height is necessary because of the two decks—automobiles upstairs and trains downstairs.

In a burst of light we emerge from the tunnel and see ahead of us the second section of the bridge—a section even longer than the first. But it is not so interesting as the suspended part. It looks more like a railroad trestle made of steel girders. Slowly it runs downhill over the shallow water of the East Bay until it comes to the Oakland end, eight miles¹⁴ from the starting point in San Francisco.

Oakland is the city where the early pioneers left their covered wagons behind and climbed aboard sail-boat ferries for the trip across the bay. And this trip might take, with stubborn winds and tides to face, half a day. What would these pioneers think now if they could return and see this marvelous silver-colored bridge soaring far above them, and hear the whir of a thousand motor cars speeding across from Oakland to San Francisco in fifteen minutes?

11. 3.2km

12. 61m

13. 180m

14. 13km

The Bay Bridge is as beautiful as it is wonderful. The huge towers, painted silver, rise 350 feet above the roadway. The cables from which the roadway is hung measure two feet thick. If the traffic is heavier on one side of the tower than the other, the tower-top may bend as much as three feet toward the heavier side.

CHAPTER II

THE GOLDEN GATE

Isn't it remarkable that San Francisco should have not only the biggest bridge, but the *two* biggest bridges, in the world? And of the two, some people think that the shorter one—the red one—is the more wonderful. This one swings over the Golden Gate, the entrance to San Francisco Harbor, and so is called the Golden Gate Bridge.

It is likewise of the suspension type—hung on cables. But whereas the Bay Bridge is made of several spans linked together, the Golden Gate Bridge makes just one mighty leap across—one single span four-fifths of a mile¹ long, a span almost *twice* as long as any single span on the Bay Bridge. Its towers, 750 feet high², are half again as high as the Bay Bridge towers. Beneath it the tides race in and out through the Golden Gate, and great Pacific liners pass, liners that are dwarfed by the shining steel web which seems to float as if by magic far above the tallest masts of the greatest ships.

On the other hand, the red bridge has only one roadway—for automobiles and trucks. There are no tracks for elevated trains.

And now we are going to visit *this* bridge, and see which of the two we think is the greater.

Just where the mile³-wide “gate” is narrowest, a little peninsula juts out from the San Francisco shore. On this peninsula's point, in 1854, the United States Army built a brick fort called Fort Winfield Scott, after the famous American general of that name. The guns of this fort were of the largest size ever made up to that time and could shoot all the way-across the channel—over a mile—and prevent any hostile battleship from entering the harbor.

One of the army officers stationed in the fort in 1879 was a colonel named Sydney Taylor. His wife and his ten-year-old son, Sydney, Junior, lived there, too. One day little Sydney asked a gunner what that powder

1. 3.2km
2. 61m

3. 180m

was which he packed into the muzzle of the big guns to fire them. The gunner, thinking it amusing to make fun of the little boy's ignorance, said *charcoal powder*.

Straightway Sydney thought to himself: "If it's only charcoal powder, perhaps I can fire the big guns." So he pounded up a big basketful of charcoal and, when nobody was looking, stuffed this grit into the mouth of the biggest gun and used a ramrod to pack it tight. Then he set a match to it and plugged his fingers into his ears to keep out what he thought was going to be a terrific explosion.

But the charcoal grit crammed into the gun wouldn't even burn. Disgusted, Sydney left it as it was, and went off to some new adventure.

Then, a few days later, great excitement swept over the fort. A ship carrying Ulysses [u-LIS-eez] S. Grant was entering the Golden Gate. This was the world-famous General Grant who had led the northern armies to victory over the southern Confederacy, the General Grant to whom Robert E. Lee had surrendered, the General Grant who had twice been President of the United States, and was now on a triumphant trip around the world. He must be given a twenty-one-gun salute—and quickly—for his ship was sailing swiftly by, with the incoming tide.

The gunners prepared to man the biggest gun...

It was full of charcoal grit!

And by the time this grit had been cleaned out, and gunpowder put in, Grant's ship had disappeared around the corner of the harbor.

The General's companions were indignant, and all San Francisco ashamed, that the fort had failed to salute one of the greatest living American soldiers, and the most celebrated person who had, up to that time, ever come to California.

But why do I tell this story? I tell it because Sydney continued to grow up in that fort, gazing across the rushing waters of the Golden Gate, wondering if, someday, giants might build a bridge across it... how wonderful it would be... a bridge soaring from side to side!

But he not only dreamed—he planned and worked too. And, thanks

in part to his vision and enthusiasm, the bridge was built, not by giants but by American engineers. And to Sydney Taylor went the office of traffic-master, the official who has control of all bridge traffic.

So now he speeds across his dream bridge and looks down, 240 feet⁴, right on top of Fort Winfield Scott—for one section of the bridge arches protectingly over the old fort, deserted now but still standing. And there below he sees the rusty old cannon that once failed to greet Ulysses S. Grant.

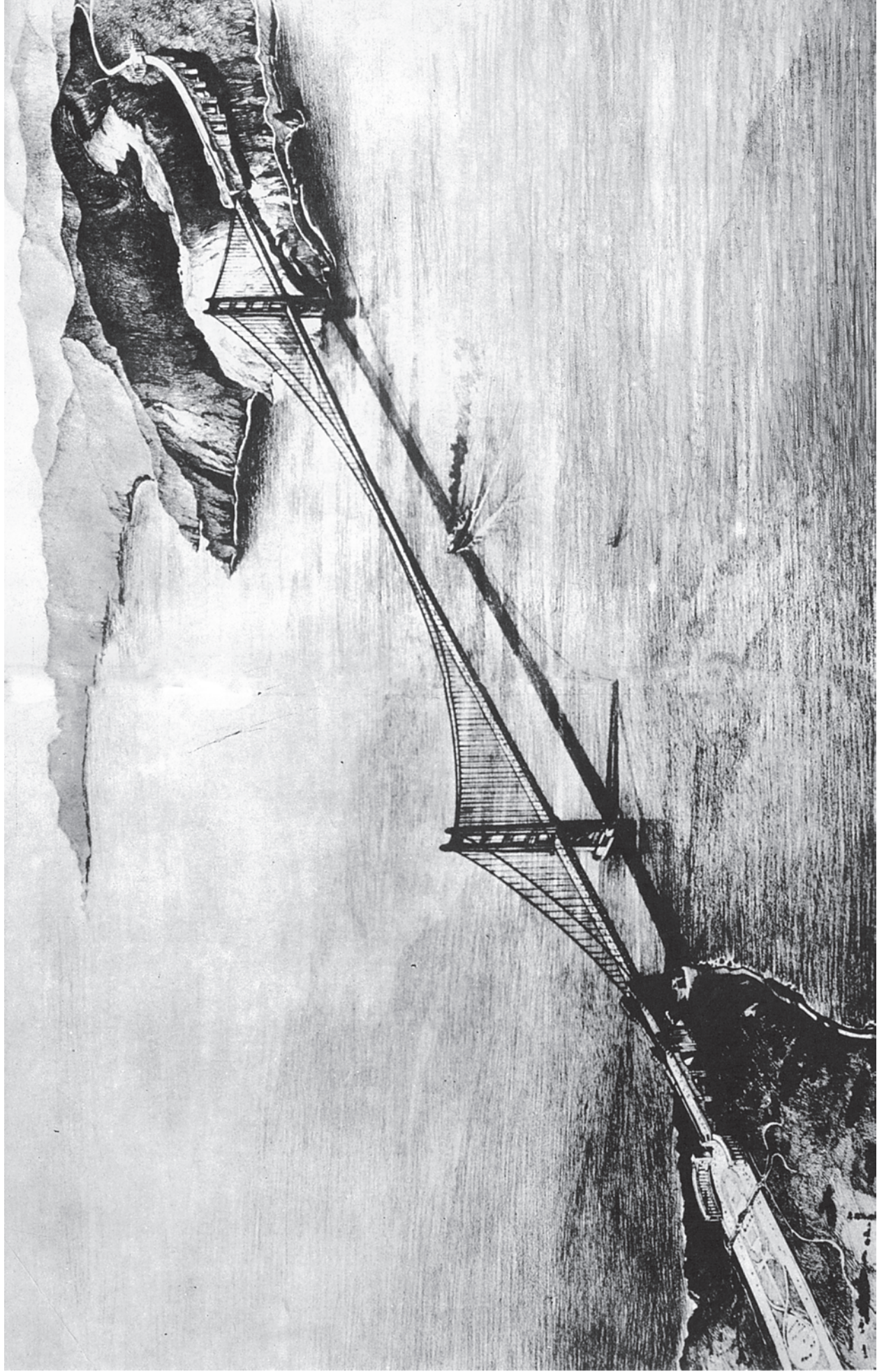
And we, too, having climbed on foot along the sidewalk of the long winding ramp, can now look over the edge—down into the courtyard of the fort. Behind us on the shore are strewn the batteries and the barracks of the modern army post, and before us stretches the most marvelous bridge-span on earth, suspended from the two parallel three-foot-thick⁵ cables. The concrete supports are big as the walls of Babylon; the two enormous red towers high as the Woolworth Building; the cables half again as big as those on the Bay Bridge. Indeed this bridge *does* seem to have been built by giants, but by giants who loved great beauty as well as great size; for with all its overpowering magnitude this red rainbow of steel has the grace of flight, and the rhythm of a poem.

We're in the middle of it now, at the point where the cables sag down to touch the roadway. At this point we are 2100 feet⁶ (a distance as great as two *Queen Marys*) from either tower. And though we are 260 feet⁷ above the waves of the Golden Gate, the towers rise nearly another 500 feet⁸ above. I was allowed to climb one of these towers long before the roadway had been added. And while I stood on top of it, braced against the never-ending wind, and marveling at the glorious view—the bay, ringed with its hills and cities to the east, the open ocean to the west—a

4. 73m
5. 90cm
6. 640m

7. 80m
8. 150m

Across the Golden Gate, the entrance to San Francisco's harbor, swings this marvelous bridge. Its 4000-foot span is twice as long as the Bay Bridge spans. Its towers, painted red, are 750 feet high—high as the Woolworth Building. The cables, three feet thick, hold the single-deck roadway 260 feet above the waves. The ship passing beneath the center of the bridge is not a tug, but a great passenger liner. The Pacific, on the left-hand side, fades away into the haze. When the sun sinks into the western ocean, and shines straight against this brilliant-colored bridge, it sets the red towers on fire. The cables gleam; the vast white concrete piers at either end turn gold. This bridge at sunset is a glorious sight.





One of the steel spans of the Golden Gate Bridge arches protectingly over old Fort Winfield Scott. This fort was built in 1854 at a point where the Golden Gate is narrowest. It was in this fort that the commander's ten-year-old son, Sydney Taylor, Jr., in 1879, stuffed the biggest cannon so full of charcoal dust that it was unable to fire a salute when General U. S. Grant passed by.

great bank of dense fog rolled in from the Pacific and blotted out all the earth below. The ocean, the bay, the Golden Gate, the hills on either side, all disappeared, and left nothing visible but the massive red tops of the two soaring towers—my tower and its twin, four thousand feet⁹ away. All the rest of the world was fog and sky. Would you like to have been there, too?

The best time to cross the bridge is at sunset. Then the sun dips into the ocean just out there beyond the entrance to the Golden Gate. It shines straight against the brilliant-colored bridge, and sets its red towers on fire. The cables gleam; the vast white concrete piers at either end turn gold. Behind, the sunset beats upon the spires of San Francisco, lights up the deep-blue water of the bay, and illuminates brightly the cities on the eastern shore, stair-stepping up the mountain side.

And perhaps as we watch, a great ocean liner, far down below, sails swiftly beneath us, headed straight for that flaming sunset—and on to China; or America's biggest battleship, coming home from the sea, glides below the rainbow and into the bay—a watch-dog, a guarantee of safety, for this incomparable monument to the courage and the genius of man.

The author visits the top of a tower during construction of the Golden Gate Bridge. The steel helmet had to be worn by all visitors and workmen as a protection against falling bolts.



CHAPTER III

THE HIGHEST WATERFALL

Where shall we go next on our wonder-tour?

There is Mount Rainier [ray-NEER], not too far away, in the state of Washington—the most beautiful and graceful mountain in America.

There is the forest of giant trees in California's Sequoia [see-KWOI-ya] Park—trees three hundred feet high¹ and three thousand years old.

But even more marvelous, to me, among the wonders of the Pacific coast, is Yosemite [yoh-SEM-i-tee] Valley. And Yosemite is less than two hundred miles² from San Francisco. Let's go there.

Up to the year 1851, ten years before the American Civil War, no white man knew that Yosemite existed. It was lost in the heart of the Sierra Nevada [si-AIR-a ne-VAH-da], and its secret guarded by peaks and canyons.

But the Indians knew. For centuries Indians had lived in this miraculous valley, hidden from the world by the mile-high³ precipices that walled them in.

This peace and security came to an end in 1851. Two years earlier, gold in vast quantities had been found in California, and thousands of gold-seekers came struggling across the continent by ox-cart to share the new-found wealth.

These miners and adventurers had no consideration for the welfare and happiness of the Indians. The invaders mistreated them, slaughtered the game and destroyed the fish. The Indians fought back. They killed the white men and burned their log houses, and ran away into the depths of the mountains.

To capture and punish one such party of Indian raiders, a company

1. 91m
2. 320km

3. 1.6km

of white volunteers, under the leadership of Major James Savage, in March, 1851, struck out along snow-covered trails that led straight into the enemy's country, trails along which no white man had marched before.

Their path, winding through dense forests, suddenly brought the party to the edge of a precipice. Major Savage, at the head of his column, looked over the brink. And what he saw made him forget all about the Indians.

For he beheld a great gorge in the mountains, floored with forests and meadows, and surrounded by cliffs and rock-towers that rose thousands of feet—rose so sheer and smooth that not even the smallest tree could find a crack in which to grow. And plunging down into the valley from the tops of these giant cliffs were waterfalls the like of which no white man in all the history of the world had ever before seen.

Near the spot where Major Savage stood, a river rushed to the edge of the wall, and fell six hundred feet⁴ through space—nearly as great a fall as *four* Niagaras. And as it fell it was torn into spray and mist so that it seemed to float in white and lacy folds down to the rocks below. Undoubtedly Major Savage thought:

How much it looks like the veil of a bride!

Bridal Veil is its name today.

Quickly the Major led his men down the steep trail to the river at the bottom of the canyon. Opposite, they beheld a gray granite precipice three thousand feet⁵ high, smooth and clean, and shining in the sun. And so boldly did it thrust up its soaring face into the sky, the discoverers named it El Capitan [el kah-pi-TAHN]—The Captain.

But what was that strange thundering the soldiers heard higher up the valley? Had the Indians received a supply of cannon?

To find out, the scouting party hurried on. They moved cautiously through the trees, nearer and nearer the booming. Now they were just below it. They pushed aside the underbrush... And stared before them! No cannon here. No angry god. Only another waterfall. But *such* a waterfall! It came tumbling down at them from a point *2600 feet above*⁶!

4. 180m
5. 915m

6. 790m

Can you imagine that?—a waterfall *sixteen times* as high as Niagara? You say there is no such thing—it's impossible. That's what Major Savage said.

But it was real. He felt the spray blowing in his face. He heard the thunder of the water, and felt the rocks tremble. He was looking at the highest and most spectacular waterfall on earth.

Because he was so close he didn't realize that this amazing cascade was not all one great leap. Not until he crossed the valley to the other side could he see that the river made three leaps to reach the canyon floor. The first was fifteen hundred feet⁷—higher than two Bridal Veils. Then came eight hundred feet⁸ of cataracts. And then, seething and racing and foaming, the river plunged one last time, in a frenzy of spray, three hundred feet⁹ more.

Marveling, the explorers moved deeper into this wonderland. Straight ahead, blocking out the sky, they now noticed an extraordinary peak—a perfect half-dome of mountainous rock rising nearly a mile above them, with its flat, sliced side facing the valley. Some of the soldiers thought this curious half-mountain even more remarkable than the great cascade.

By night the company still had found no Indians. But they had found four more waterfalls ranging from three hundred feet to sixteen hundred feet¹⁰. They had found trees thirty feet¹¹ thick. They had found a secret treasury where Nature had collected her rarest gems of beauty. They had found, for the world, the valley without an equal—Yosemite!

And everything that this company found we can see today. Scarcely a tree or a stone has been changed.

On our own visit to this famous valley we have reached the narrow entrance. Guards stop us and ask if we have any cats or dogs. No cats or dogs are allowed, because, as everybody knows, Yosemite has become a National Park and a wild-game preserve where birds gather by the

7. 457m

8. 245m

9. 91m

10. 90m to 490m

11. 9m





thousands, and where herds of deer graze beside the road, protected and unafraid. Cats might kill the birds and dogs attack the deer.

We travel on through a tunnel of trees between overhanging rocks. Suddenly the tunnel opens into a wide glade beside a lake. We are on the very spot where Major Savage pitched his camp. El Capitan raises its smooth, glowing granite face straight above us. And on the opposite side Bridal Veil Falls, soft and serene, swaying and singing, trails its six hundred feet¹² of mist-folds down the cliff.

Soon we, too, hear that strange thunder ahead—the same thunder Major Savage heard. But *we* know what it is. We turn a corner of the drive and come face to face with the highest of all waterfalls. We see it as it first flows over the rim of the valley a half-mile¹³ above, as it tumbles fifteen hundred feet¹⁴ in one great, white, ever-widening plume of foam, as it plunges on downward, around and over the rocks, as it makes its final leap, to end in a roaring, boiling cauldron of spray and rainbows right beside us.

And as we watch, fascinated by this astonishing sight of flying water and mighty granite wall, the wind beats upon the falls as upon a sail. It blows the entire plume in a great curve far to one side, then to the other side, then lures it out from the rock face only to dash it back against the cliff with an explosive roar that shakes the valley.

I climbed once to the brink of this great waterfall, and stretched flat on the rock and looked over the edge, out upon the falling plume. I watched it being torn to pieces by the wind as it plunged down into the abyss. And the roar that rises fifteen hundred feet up the falling column of water from the unyielding rocks is a hundred times louder and wilder than the noise heard from below. It is an awesome sight and a terrifying sound.

But this time we are not going to climb to the rim of the Great Falls because we have an even more interesting climb ahead—to the top of Half Dome.

12. 180m

14. 460m

13. 800m

Yosemite Falls, the highest waterfall in the world. From the top of the cliff to the canyon floor is a drop of 2600 feet. The river's first leap is 1500 feet. Then comes 800 feet of cataracts (not seen in the picture). The last plunge is 300 feet. The total is *sixteen times* higher than Niagara.

For twenty-five years after Major Savage and his party discovered Yosemite, people tried to climb Half Dome. But they couldn't. The curve of the dome was too steep, and the surface, worn smooth by wind and snow, too slick. Chipmunks and squirrels could climb it. These little animals lived happily on top, and laughed because human beings only slid down every time they tried to crawl up.

But in 1875 a Scotchman named Captain Anderson amazed all California by conquering the curve and the slickness. When he claimed to have climbed Half Dome, alone, nobody would believe him. So he took several friends and showed them how he had driven iron pegs into the rock crevices, one peg above the other. By means of these he pulled himself up, for the last thousand feet¹⁵, over the curve of the dome to where it was flat on top.

From that day to this the chipmunks and squirrels have had a bad time of it, for Captain Anderson's series of pegs led to the building of a ladder, which today has steel cables on either side for hand rails. These rails help you to pull yourself upward and keep you from sliding off the slick surface of the dome.

To climb this thousand-foot ladder is not easy. But it's a fine adventure. Are you wearing rubber-soled shoes! You'll need them. Are you a good rider? We must first ascend eight miles¹⁶ of mountain trail on horseback to get to the base of the curving cliff.

Now we start the final struggle, pulling ourselves up the almost vertical ladder by means of the cables. At first our arms do all the work, while our feet just try to keep up with us. We slip and slide, but the rungs of the ladder prevent our falling all the way down. We can

15. 300m

16. 13km

Half Dome Mountain, in Yosemite Park. The top of this wonderful mountain is 9000 feet above the sea, and 5000 feet above the valley floor. The precipice drops 2000 feet. So smooth and steep is the curve of the half-dome, that this mountain was long considered unclimbable. But in 1875, Captain Anderson, a Scotchman, amazed all California by conquering the curve and the slickness. He drove iron pegs into the rock crevices, one peg above the other, and by means of these pegs pulled himself up. Since then a ladder has been built by which you and I climb to the summit. On top we look over the edge of the cliff where the mountain was sliced in half. It's like flying. The thunder of the cascades is only a murmur now. The forests, a mile below, are soft green mats. Every foot of this marvelous Yosemite Valley is unrolled beneath.



understand very well how this slick, steep dome defeated all climbers, Indians and white men alike, for so long.

We express a silent thanks to Captain Anderson. Without the cables and the ladder we wouldn't be able to move ten feet¹⁷ upwards.

We're getting tired—our arms ache—the cables chafe our hands. But the higher we go the less steep the curve of the dome becomes—and less steep, and less steep, until it's almost flat—and we're on top.

We are 9000 feet¹⁸ above sea-level, and 5000 feet¹⁹ above the valley floor. From the topmost point a great projecting rock hangs over the 2000-foot²⁰ precipice-side where the mountain was sliced in half. We stand on this overhang and look down. It's like flying. The thunder of the cascades is only a murmur now, and far away. The forests, a mile below, are soft green mats. The snowy Sierra rises about us. Every foot of this glorious valley is unrolled beneath. We know now how Major Savage felt when, pursuing that band of Indians, he burst upon this hidden paradise of peak and waterfall; and we can understand why the Indians, driven from this happy hunting ground out into the barren plains, died of homesickness for Yosemite.

17. 3m

18. 2750m

19. 1500m

20. 600m