

BURNING THE SIERRA MADRES.

BY CHARLES F. HOLDER.

The Sierra Madre Mountains from the vicinity of Mojave to San Diego have an important bearing upon what is to all intents and purposes the great American oasis, Southern California, being a fertile section between the Desert of California on the east and the ocean to the west. Stranger or more antipodean conditions are rarely seen in such close proximity, the mountain range forming the line of demarkation between one of the garden spots of the world and the greatest desert in America. From the summit of Mt. San Antonio, which is one of the sentinels of the region, the climber can by a mere turn of the head, a sweeping glance, take in all this wonderful country of extremes; or he can face the south and west and see both conditions at once. To the east are the burning sands of a region given over to the elements, the sandstorm, mirage and intense heat that in some localities, as Death's Valley, is almost intolerable, and death to man or beast caught in its toils without water. To the west the eye falls on the Southern Californian oasis, a small green strip on the ocean slopes of the mountains, abounding in groves of lemon, orange, vineyards, orchards of all kinds—a striking and remarkable contrast. The latter are possible on account of the water on the south slopes of the Sierras, which falls in the great watershed of the range from twenty to forty miles wide, and finds its way down to the Valleys of San Gabriel, Pomona, San Bernardino, Redlands, San Fernando, Santa Clara and others.

Originally the mountains were covered with a thick growth of chaparral, greasewood, manzanita, wild lilac, brush oak and many more growths, while the north slopes bore large oaks, spruces, and the cañons cottonwoods, bay, sycamore and others. The leaves and natural decay of this covering formed that essential for rain holding, an upper crust of dead vegetation which retained the water allowing it to slowly trickle down the mountain side and soak into the ground. Such was the normal condition, and fifty years ago the forests abounded in large trees and the valleys in attractive groves of live oaks of several kinds. Since the growth of towns and cities along the foothills the mountains have been devastated in every direction. Campers build fires and go off and leave them, and every year, for the past sixteen in the writer's knowledge at least, large fires have raged.

This has been particularly true in the last five years. Fires have caught on the valley side, swept up the mountains denuding the slopes of every bush and weed, leaving the barren rocks to alone tell the story. Opposite the city of Pasadena a huge blemish is seen on the face of the mountains. A vast acreage of the Sierra Madres has been fire-swept, and mile after mile of cañon and forest has been destroyed. The fires, especially in September, spread rapidly, the columns of smoke rising several miles into the air, forming a marvelous and majestic spectacle. The sun blazing upon this changes it into molten silver, while the flames from below color the lower portion with all the tints of red, scarlet, yellow and vermilion, while below this again masses rolled upward as from a volcano—black, brown, burnt umber and all the somber shades, producing a color scheme beyond the conception of the artist. The sides of the mountains for miles are seething yellow flames, at night presenting a brilliant spectacle, sweeping up the mountain side with the roar of a cataract, cutting out densely wooded cañons, leaping gulches—credible spaces—and laying waste the entire section of country.

The repeated occurrence of these fires finally aroused the people of Southern California to the fact that the water supply, upon which everything depends, was threatened. When the rain came a

**FOREST FIRE IN THE SIERRA MADRE MOUNTAINS.**

stream as black as ink swept down the Arroyo Seco for days and weeks, showing the extent of the burned area and emphasizing the fact that the water was rushing down the mountain side carrying with it

**EAST INDIAN COOLIE WITH HIS DONKEY.****MOHAMMEDAN RELIGIOUS FESTIVAL OF EAST INDIANS IN THE ISLAND OF TRINIDAD.**

the charred remains of the verdure which once covered it. It was evident that some definite and systematic method of fighting fire was necessary. The volunteers soon gave out, and as a result a force was organized under the direction of the forester of this section and a plan of action decided upon; but it came too late to save the best portion of the mountains. Now lines of white can be seen leading over the cuts after a snowstorm; these are the fir trails built by the fire fighters, first, to enable the men to ascend the mountains quickly, and, secondly, to aid in staying the flames, the barriers running across the range cutting off the fire from below.

These trails are from ten to twenty feet wide, the vegetation being entirely cleared away.

By thus systematizing the work a gang of from one hundred to two hundred men can successfully combat the largest fire. The fire has made serious inroads from San Francisco down, especially at Santa Barbara; the mountains known as the Santa Inez have been burned over many times, and on one occasion the Lick Observatory was saved only by the herculean efforts of Dr. Holden, then director, and a corps of volunteer fire fighters.

In the Sierra Madres the fires will continue every year, as in summer hunters, campers, fishermen and prospectors are in every cañon; many camps and small hotels in the interior of the range are liable to be cut off. The camps of Mt. Wilson, and even the hotel at Mt. Lowe have been in danger several times, but in the future these and other resorts will be well guarded.

EAST INDIANS IN THE ISLAND OF TRINIDAD.

When slavery in the British West Indies was abolished the sugar planters experienced a severe struggle with the labor problem. The negroes, when freed, refused to work in the cane fields, and it at once became necessary to get a fresh supply of labor from some other source or abandon the sugar colonies. Consequently the importation of coolies from India was resorted to. Agents of the British government were sent to Calcutta to arrange for the exportation of laborers. This exportation, which continues to the present time, as the planters demand, was made by an indenture with these coolie immigrants, by which they are bound to work for a term of five years on the plantation to which they are assigned by the government. In order to avail themselves of the use of this labor, the planters are obliged to execute a contract with the colonial immigration authorities, agreeing to provide food, clothing, lodging and medical attendance and to pay them 6 pence (12½ cents) per day each for their labor. The laborers are bound to work six days of 7½ hours each in every week. At the expiration of the term of five years the contract can be renewed if the laborer desires it, or he may have a free passage back to India. A fine of a day's pay is levied on the laborer for each and every day he neglects to do his bounden duty. The Colonial Government authorities reserve

the right to remove the laborers from any plantation if they are not properly treated.

The East Indians that immigrate to these colonies are either Mohammedans or Hindoos. The various caste distinctions are not easily defined by the uninitiated, but are as carefully observed as in their native country, and the smallest infringement is a deadly sin; and, although crossing the ocean degrades all Hindoos, the castes still keep their relative distances and never sink to the same level. The Mohammedans reverence two Persian saints, Hassan and Hosien, and an annual religious festival is held each year. The accompanying illustration represents this celebration in the Island of Trinidad. Hassan and Hosien were the sons of Ali, a Persian Caliph, and his favorite wife, Fatima, daughter of