

NOTES ON OMAN

BY REV. S. M. ZWEMER, BAHREIN, ON THE PERSIAN GULF

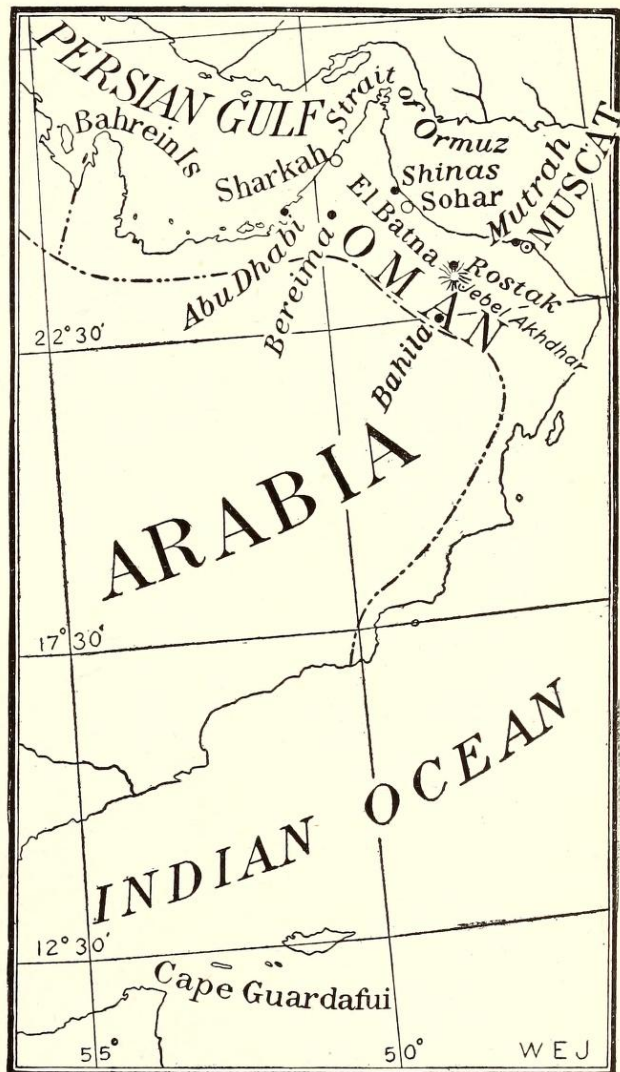
AMONG the most unknown regions of the earth geographically is the Arabian Peninsula, and one of its least-known provinces is Oman. Historically, politically, and geographically Oman has always been isolated from the rest of Arabia. Ever since the days of the caliphate, and as far as outside communication with other Arabs is concerned, Oman was practically an island, with the sea on two sides and the desert on the other. The people are, therefore, even more primitive in their habits than the Arabs generally, and only recently have other towns than Muscat, the present capital, opened their eyes to the wide world.

The coast line of Oman extends for about a thousand miles, from the Strait of Ormuz, southeast and southwest; the province has an area of 82,000 square miles and a population estimated at 800,000 by the Statesmen's Year Book, but by Colonel Miles, who has seen more of the interior than any other recent traveler, at over 1,000,000. The capital, Muscat, and the adjacent town of Mutrah have together about 25,000 inhabitants. The ancient capital, Rostak, has declined in importance since Muscat was occupied by the Portuguese, from 1508 to the middle of the seventeenth century.

Ahmed bin Sa'eed, originally from Yemen, captured Muscat and was elected Imam of Oman in 1741. His family have since been the rulers of this part of Arabia, and the present Sultan came to the throne on June 4, 1888. At the beginning of the last century the power of the Imams of Oman extended over a large part of Arabia, the islands in the Persian Gulf, a part of the Pirate Coast, and a long strip of the African coast south of Cape Guardafui, including Socotra and Zanzibar. At this time the slave trade was flourishing, and it was the Arabs of Oman who explored the great interior of Africa long before the

days of Speke and Livingstone. On the death of Sultan Sa'eed in 1856 two rival sons divided the government, one becoming the Sultan of Zanzibar and the other of Muscat.

The present Sultan has for many years been under the protection of the government of India, and Oman is practically a native state like other states in India. A British consul and political agent resides at Muscat, and although the Sultan's revenue amounts to about \$250,000 his authority does not extend far inland, and there is little security for



OUTLINE MAP OF OMAN



THE SULTAN SAYYID FEYSIL BIN TURKI, THE PRESENT RULER OF OMAN, WHO
SUCCEEDED HIS FATHER JUNE 4, 1888

He is a progressive ruler, and the closest relations have existed for years between the govern-
ment of India and his sultanate



ANCIENT WELL ON THE ROAD FROM MUSCAT INLAND

Showing the primitive method of drawing water by bullocks or donkeys in large skins for purposes of irrigation

life and property when the tribes are at war. In recent years trade has greatly increased, and there has been considerable agricultural development. The mineral resources of the province are not well known, and a great portion of it is still largely unexplored.

Some years ago it was my privilege to cross from Abu Dhabi, on the Pirate Coast, through Bereima to Sohar, and also from Sharkah, on the Pirate Coast, to Shinas, in both cases traveling along the coast from Sohar to Muscat.

The Pirate Coast was formerly noted for the savage ferocity and fanaticism of its inhabitants. Sir John Malcolm wrote fifty years ago concerning the people: "Their occupation is piracy and their delight murder; they are monsters."

Thanks to English commerce and gunboats, these fanatic Arabs have become tamed. Most of them have given up piracy and turned to pearl-diving for a

livelihood. Their black tents and rude dwellings have made room for four important towns. As the slave trade has always flourished until recent years, a large part of the population of Oman is of negro descent, and at least four distinct African languages are spoken in the bazaars of Muscat and among the slaves in the interior. I quote a paragraph from the account of my journey:

"We heard on every side that traveling in the interior of Oman was safe, so, after bargaining with camel-drivers, we secured two companions and five camels to take us to Sohar for the sum of twenty *rials*, or Arabian dollars. At 9 p. m. on May 20 we left, and, after a short rest at midnight to water the camels, marched until 9 o'clock the next day. By going as much as possible by star-light to avoid the heat, and resting during the day under some scraggy acacia tree or in the shadow of a Bedouin



ONE OF THE CASTLES THAT GUARD MUSCAT AGAINST BEDOUIN INVASION FROM THE INTERIOR: THE SULTAN'S FLAG IS FLYING FROM THE RAMPARTS

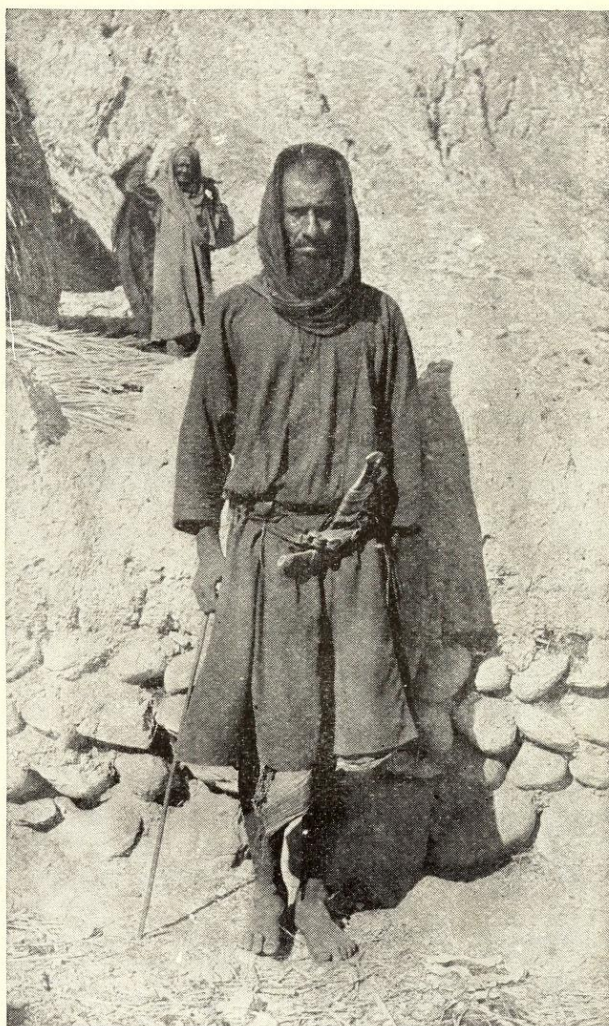
fort, we completed the distance of ninety-odd miles in a little over four days. A large part of the way we took was desert, with no villages or even nomad booths; the more usual route by Wady Hom being a little unsafe, we followed Wady Hitta.

"On the second day we passed villages and cultivated fields; that night we slept in the bed of the wady, surrounded by thousands of sheep and goats, driven in by Bedouin lasses from their mountain pastures. Even among these shepherds we found readers, and the colporteur sold books wherever the camels halted long enough to strike a bargain. It was late on Wednesday, May 23, that we entered the narrow pass of Hitta. Our guides preceded, mounted, but with rifles loaded and cocked; then followed the baggage camel, to which mine was 'towed,' and in similar fashion my companion on the milch camel, followed by its two colts.

"We were not troubled with the heat at night, but during the day it was intense, and it was refreshing to come to an oasis (common in this part of Oman), where water burst from a big spring and trees and flowers grew in luxury. In the mountainous parts of Oman the roads run almost invariably along the wady beds; sometimes these are sandy water-courses; again deep, rocky ravines or broad, fertile valleys. Vegetation generally is tolerably abundant. Tamarisks, oleanders, euphorbias, and acacias are the most common trees and shrubs.

"Where the country appears arid and sterile we were surprised to find a considerable population of shepherds and goatherds. Their dwellings are mere oval shanties constructed of boulders or rocks, and they subsist on their flocks. In the fertile valleys the population always centers in villages, and scarcely ever is a dwelling found at any distance from this common center. Here often are the fresh-water wells with the watchtower to protect them.

"Just at the top of the pass of Hitta is the village 'Ajeeb, rightly named 'wonderful.' The view down the mountains



NATIVE OF THE HILL COUNTRY OF OMAN

over the fertile stretch of coast called El Batna and out over the boundless Indian Ocean was grand. We descended to the sea, and the turbulent mountain stream, so cold to our bare feet as we waded it in the early dawn, dwindled to a brook, and at last ebbed away along the beach, a tiny stream of fresh water. These perennial streams are the secret of the fertile coast all the way from Wady Hom to Birka."

The whole country through which we passed, as well as the region north of Muscat, is capable of development if only there was a good government and intertribal warfare could be prevented. The Batna coast is the exception to all the maritime plains that surround so large a part of the Arabian Peninsula. In western and eastern Arabia these



SON OF THE SULTAN OF OMAN ON A FULL-BLOOD ARAB HORSE UNDER A NUBUK TREE

sandy plains are nearly all barren, but from Muscat for 150 miles north date plantations and gardens extend almost to the ocean beach. Fresh water comes down from the high mountain ranges of Jebel Akhdar, and the Omanese Arabs are most successful in their primitive methods of irrigation.

The chief authorities on the interior of Oman were until recent date Niebuhr, Wellsted (1835), Whitelock (1838), Eloy (1843), and Palgrave (1863). Palgrave, however, only visited the coast, and his account of the interior and its history is pure romance. Later travelers, especially Colonel Miles (whose recent articles on Oman in the *Geographical Journal* are very valuable), my brother, Peter J. Zwemer, and Dr. James Cantine have visited the chief cities of

Jebel Akhdar and corroborated the accuracy of Lieutenant Wellsted in his "Travels in Arabia."

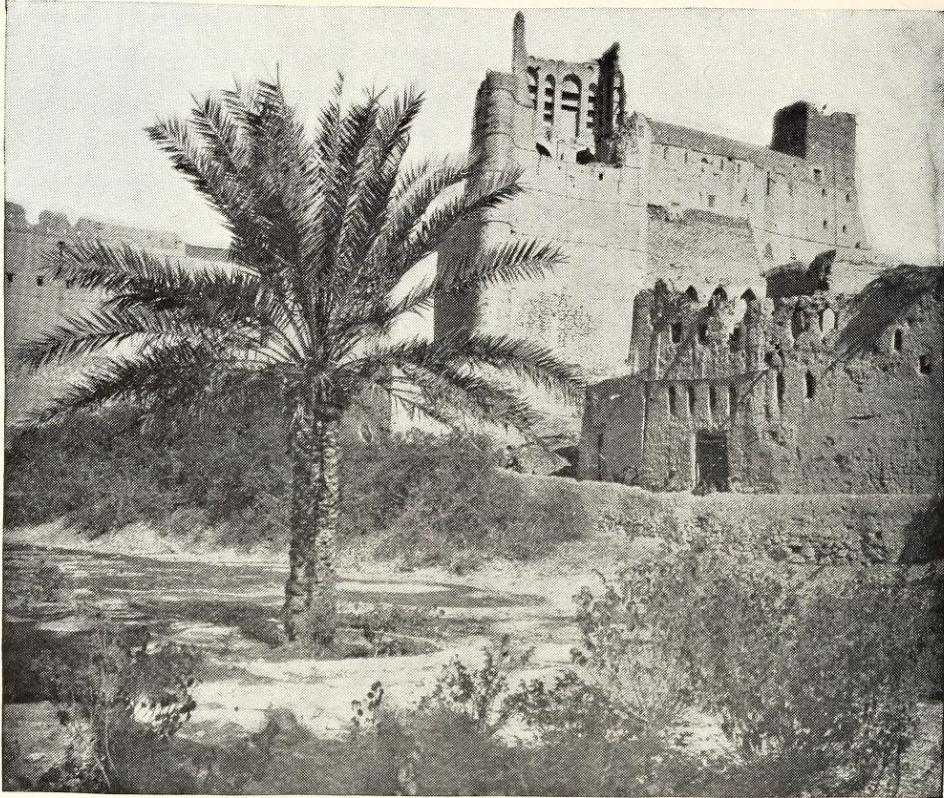
Although Colonel Miles reached the edge of the Oman Desert, all the country beyond is still largely *terra incognita*. No one has ever made the journey beyond the range of mountains or solved the mystery of western Oman, which is still a blank on the best maps; nor do we know anything of the land 100 miles southwest of Muscat save by Arab hearsay.

The most populous and fertile district of the highlands of Oman is Jebel Akhdar, which is also the best known. The fertility of this region is wonderful and in striking contrast with the barren rocks of so large a part of the coast. With a semi-tropical climate, an elevation of

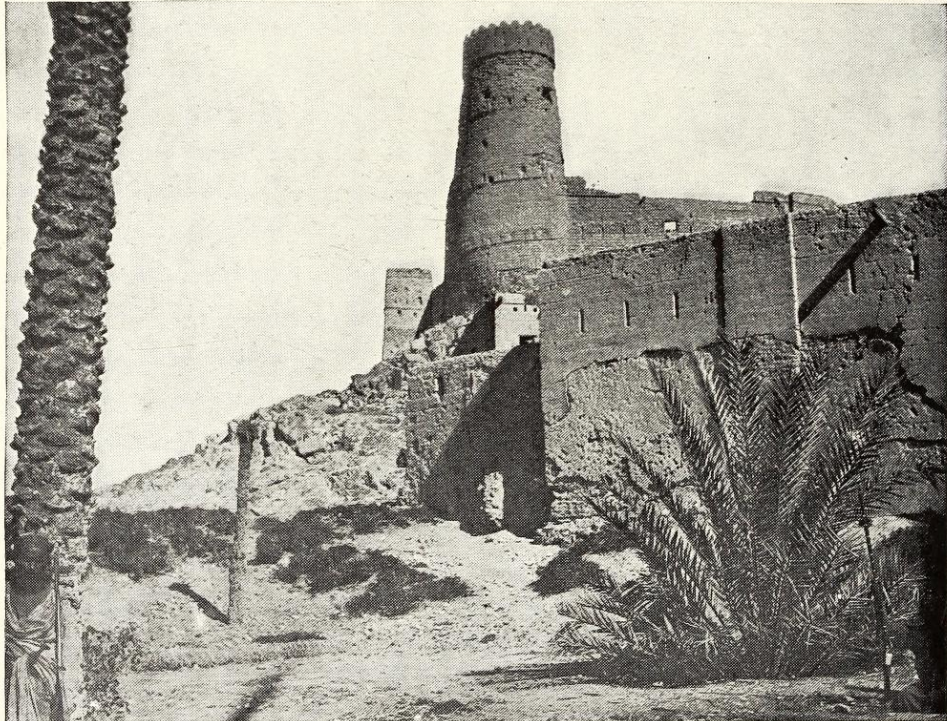


NATIVE WOMEN OF OMAN

The heavy silver anklets, ear-rings, bracelets, and nose jewels are typical, as is also the peculiar veil worn over the face

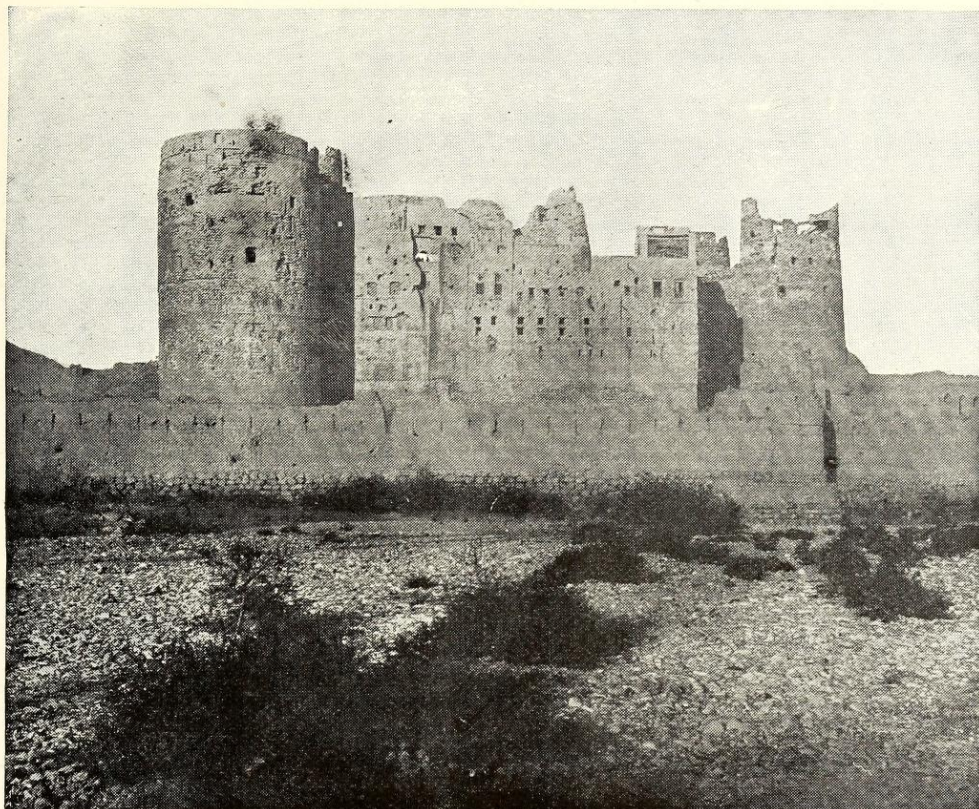


PART OF THE FORT AT BAHILA, IN OMAN



THE WIND TOWER ON THE FORT AT BAHILA

The town of Bahila during the fourteenth and fifteenth centuries was the capital of Oman. Its castle is a large, substantial, and handsome edifice, says Col. S. B. Miles, who visited the town some years ago. The castle is ornamented with two towers, one of which, probably the loftiest structure in Oman, is called the Wind Tower and has apartments in it for use in the hot season, when the open and elevated windows let in the welcome breezes from all quarters. Photos by Lieut. Col. S. B. Miles. From the *Geographical Journal*, London, England.



THE OLD FORT OR CASTLE AT ROSTAK

Photo by Lieut. Col. S. B. Miles. From the *Geographical Journal*, London, England.

3,000 to 5,000 feet, and abundant springs, the wadys and oases of Oman have awakened the delight and amazement of every traveler who has ventured to explore them. Water, the one priceless treasure in all Arabia, here issues in perennial streams from many rocky clefts, and is most carefully husbanded by the ingenuity of the people for wide irrigation by means of canals or water-courses called *faluj*.

Wellsted thus describes these underground aqueducts: "They are, as far as I know, peculiar to this country, and are made at an expense of labor and skill more Chinese than Arabian. The greater part of the surface of the land being destitute of running streams on the surface, the Arabs have sought in elevated places for springs or fountains beneath it. A channel from this fountain-head is then, with a very slight descent, bored in the direction in which it is to be conveyed, leaving apertures at regular distances to afford light and air to those who are occasionally sent to keep it clean.

In this way the water is frequently conducted for a distance of 6 or 8 miles, and an unlimited supply is thus obtained. These channels are about 4 feet broad and 2 feet deep and contain a clear, rapid stream. Most of the large towns or oases have four or five of these rivulets or *falj* (plural *faluj*) running into them.

The isolated spots to which water is thus conveyed possess a soil so fertile that nearly every grain, fruit, or vegetable common to India, Arabia, or Persia is produced almost spontaneously, and the tales of the oases will be no longer regarded as an exaggeration, since a single step conveys the traveler from the glare and sand of the desert into a fertile tract, watered by a hundred rills, teeming with the most luxurious vegetation."

Some of the photographs that illustrate this article were taken on a recent journey with Dr. Arthur K. Bennett, one of the medical missionaries of the American mission, and give a good idea of the general character of the country

and the people. Except for the Pirate Coast, the Arabs of Oman are remarkably free from fanaticism, simple in their habits, and wonderful in their hospitality. Most of them belong to the Abadhi sect, which has many beliefs in

common with Christianity, and the experience of our missionaries has been that the people are not only accessible, but willing to learn, and many of them eager not only for medical help, but for teaching.

PROTECTING OUR FORESTS FROM FIRE *

BY HON. JAMES WILSON, SECRETARY OF AGRICULTURE

DURING the past season there were unusually severe forest fires in nearly every part of the country. The national forests suffered to a greater extent than at any time since their establishment.

The fires of 1910 were primarily due to a severe drought, which extended

* From Secretary Wilson's Report for 1910.

throughout the country and which in the Northwest was the most severe ever known, so far as official records show. The spring was very dry, and in the summer, when there are usually abundant rains in the mountains, the rainfall was exceedingly small and very localized. The region most affected was the area drained by the Columbia River, ex-



A FAVORABLE CONDITION FOR BURNING PILED BRUSH



A MOUNTAIN TRAIL, BUILT FOR FIRE PATROL

The first object of the trail is to open up a forest and make it accessible for patrol and for fighting fires. The trails in the national forests are permanently constructed and are designed for saddle and pack horse travel. While their first purpose is to facilitate patrol and access to a fire, they may be used as starting points for back firing, and will often check or actually stop a small surface fire. Photo from Henry S. Graves, Chief U. S. Forest Service.

tending from the ocean to western Wyoming and Montana.

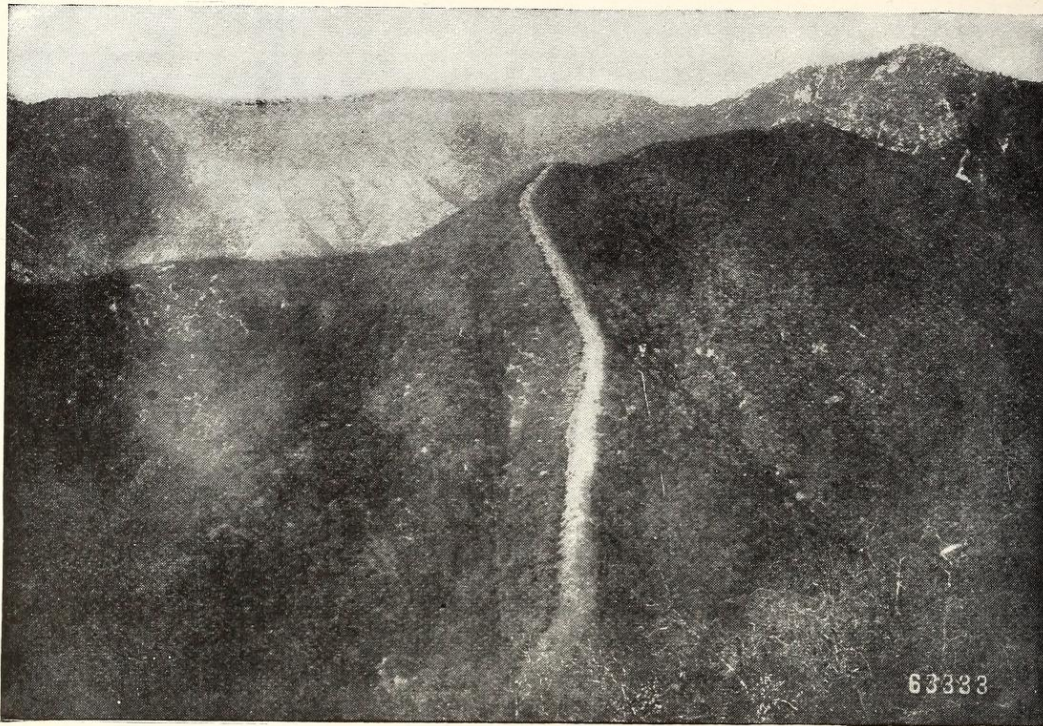
The effect of the drought was to render the forests very inflammable. Not only did the surface litter of leaves, branches, fallen logs, and other material become very dry, but the thick layer of vegetable mold in the deep, usually moist forests became like tinder.

In addition to the drought, the past season was characterized in many places by constant high winds, which rendered fire protection exceptionally difficult. The smallest escaping spark from a camp-fire or burning slash-pile was often enough to start a blaze, which, under the high winds, developed into a dangerous conflagration in an incredibly short time.

The worst fires occurred in northwestern Montana and Idaho and in eastern Oregon and Washington. Severe fires also occurred in California and the central Rocky Mountain region, but the conditions were not as difficult as in the North Pacific region and the fires were more easily controlled.

The entire forests of the northern Rocky Mountains were at one time threatened with destruction. Unless the fires had been checked, scores of towns and communities would have been wiped out and the lives and homes of thousands of people imperiled. I was confronted with the problem of either putting out the fires or being directly responsible for what would have been one of the worst disasters in the history of the country. Without hesitation I called upon the forest officers to stop the fires and to make such expenditures as seemed absolutely necessary to accomplish this result. Every source of help was called in. Temporary labor was employed where it could be secured. The War Department aided by sending troops. The railroad companies, lumber companies, and private individuals cooperated in the endeavor to avert a great disaster.

Early in September the flames were finally subdued. The fires which could be reached by roads and trails were



A FULLY CLEARED FIRE LINE IN THE SAN GABRIEL MOUNTAINS

The ideal fire line is a completely cleared strip, from which are removed not only the trees and brush, but also all ground débris down to the mineral soil. Such a line is especially necessary wherever fire will run swiftly and it may not be possible to reach the fire promptly with fighting appliances. A conspicuous example of the necessity of such fire lines and of the service rendered by them is found in the chaparral zone of the mountains in southern California, where the chaparral cover is of great importance in protecting the local watersheds. The area is large, the mountains are rough and difficult to travel, and fire runs with great rapidity. The government is therefore building extensive trails for patrol to prevent fires and supplementing them by wide, cleared fire lines to stop any fires that may start. Photo from Henry S. Graves, Chief U. S. Forest Service.

largely put out through the crews working under the forest officers. Those fires in the inaccessible areas were extinguished finally by the aid of timely rain and snow storms. While the aggregate loss of life and property was large and the cost of fighting the fires about a million dollars, I do not hesitate to state that if it had not been for the heroic and efficient work of the forest officers many millions of dollars' worth of public and private property would have been destroyed, and probably many lives would have been lost. I cannot commend too highly the self-sacrificing work of the local forest officers, who toiled day and night, week after week, risking their lives to save the forests.

The reports show that there were over 4,000 fires in the national forests during

the season. Most of them were small and were promptly extinguished by the forest officers. Only about 15 per cent of the fires were responsible for the great losses. These occurred chiefly in the inaccessible regions where they could not be reached quickly because of the lack of roads and trails, or in areas inadequately patrolled. The greatest damage was done by the great fire of August 20 in northern Idaho. Many fires were burning at that time, but nearly all of them were under control and would shortly have been extinguished had it not been for a terrific hurricane which developed and swept all fires beyond control. Within 24 hours there was practically a continuous fire for a distance of over 100 miles.

The total area burned over during the



A FIRE LINE IN THE ADIRONACKS

Where there are no roads or trails which will answer the purpose the Forest Service advocates the construction of special fire lines. These are necessarily expensive and are used only in woodlands in the better-settled portions of the country, where the property to be protected is very valuable.

season amounts to over 3,000,000 acres. While accurate data have not yet been received from all the forests, it is probable that between 6 and 7 billion feet of timber was killed. A portion of this can still be cut and utilized, so that it will not be a total loss. The damage in money cannot be accurately estimated until forest surveys are made, but it will probably reach over \$25,000,000 if both merchantable timber and young growth are considered.

The cost of fighting the fires will aggregate a little over a million dollars. This is a large sum, but it represents considerably less than 1 per cent of the value of the property saved.

It is to be deeply regretted that there was a large loss of life through these fires. Altogether 76 persons in the employ of the Forest Service were killed in fighting the fires. That more were not killed was due to the skill and coolness of the forest rangers. Where relatives were found, the bodies were

brought out and every help possible given to the families. There were 35 persons killed whose relatives could not be located.

There were a number of men injured more or less seriously. Unfortunately the law does not permit paying the expenses of the injured or their wages after they ceased their work. The hospital expenses of these men were met by private subscription. The Red Cross contributed \$1,000. The remaining expenses, including expenses of interment of the dead, were borne by subscriptions from the forest officers and other members of the Forest Service.

HOW THE FOREST FIRES ARE STARTED

Railroads continue to be responsible for a large number of fires. This will continue to be the case until the locomotives are either equipped with efficient spark-arresters or oil is used for fuel. It should be said, however, to the credit of the railroads, that during the past



A PLOWED FURROW THAT STOPPED A SURFACE FIRE

season many of them have taken an active part in assisting in the work of fire protection and fire fighting. The Chicago, Milwaukee and Puget Sound Railroad has installed oil-burning locomotives, and it is a striking fact that not a single fire has started from them, although the road traverses a long distance in the national forests.

A number of railroad companies have entered into coöperative agreements with the Forest Service to clear fire lines along the right of way and to employ special guards to patrol the tracks during the dangerous season. The effectiveness of the coöperative patrol by the railroads and the Forest Service was well illustrated in Montana and Idaho. Although a very large number of fires were started, most of them were extinguished before great damage was done. In some instances, however, no effective system of protection had been undertaken, and very damaging fires are chargeable to locomotive sparks.

One of the most prolific sources of fire and one which is uncontrollable is lightning. There are scattered through-

out the forest innumerable dead trees and stubs. During the past season there were many electric storms unaccompanied by rain. In nearly every such storm some tree was struck and a fire started. These occurred frequently in very remote and inaccessible places and resulted in fires which were very disastrous, because they could not be quickly reached.

Many fires are chargeable to carelessness, especially in leaving camp fires and in burning slashings. A larger patrol service would prevent to some extent carelessness in the use of fire in the woods, but fundamentally there is required a better appreciation on the part of the public of the need of protection from fire.

The most regrettable fact is that there has been a considerable amount of incendiaryism. While it is very difficult to prove that a given fire is of incendiary origin, circumstantial evidence has shown that many incendiary fires were started during the past season. The situation has been so serious that I have offered a reward for the conviction of incendiaries.