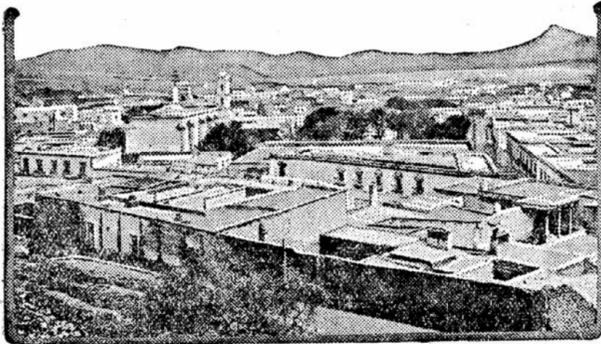


# Amid Mexico's Rich Mines



VIEW OF PARRAL

PARRAL, Mexico, which recently was the scene of tragic happenings in connection with the arrival there of General Pershing's punitive expeditionary force, is in the heart of the fabulously rich gold and silver mines district of the southern republic, mines which were among the first discovered by the Spanish conquerors and which began pouring their streams of wealth into the coffers of the monarchs of Aragon and Castile as early as 1547. This town, which has a population of less than 20,000, has been the center of Francisco Villa's operations for several years, says a bulletin issued by the National Geographic society.

Situated on the banks of the semidry Parral river, at the foot of the Sierra de la Cruz, Parral's whole history centers below ground, in the marvelously rich Veta Colorado (red vein), which runs from north to south through the Parral mining district, including Minas Nuevas and Santa Barbara.

As early as 1600, before the first permanent English settlement in the United States, there were 7,000 miners employed in this district, bringing from the depths of the earth the yellow metal destined to sustain in splendor, for a time, the opulent court of the then most powerful monarch in Europe. From that day up to the present Parral has continued to enrich the world from its seemingly inexhaustible store of silver and gold, the only interruption having been caused by a rebellion of the oppressed natives, who on one occasion flooded all the mines of the district and then deserted the city by the thousands.

The richness of the ore in this section is shown by the fact that American mining companies find it profitable today to smelt the tailings or refuse of the old Spanish works.

## Indian Kept His Secret.

One of the most interesting incidents in the early history of Parral centers about a time-stained church known as La Iglesia de la Virgen del Rayo, the favorite place of worship among the Indians of the district. In 1690 a devout native began the construction of the church, paying his helpers with ingots of pure gold, which he produced mysteriously once a week. During the twenty years required to build the structure the pious Indian baffled the spies commissioned to discover the source of his treasure, but when his work was finished the Spanish commander summoned the miner before him and demanded that the location of the mine be disclosed. When the Indian refused to tell he was tortured to death, carrying with him to the grave the secret which 200 years of search have failed to reveal.

One of the "sights" of Parral is the palace of a multimillionaire mine owner, once a humble peon. In this house, which is shut in by adobe huts and narrow streets, there are big drawing rooms and museums with luxurious carpets, over which the owner's fighting cocks are allowed to roam at will, it is said. Twenty pianos are among the most highly prized possessions of this simple, public-spirited native, the source of whose wealth is La Familia (little palm) silver mine, which he discovered many years ago.

Parral was not always the chief city of this mining district. In 1580 the nearby town of Santa Barbara was the seat of government for a vast region equal to one-third the area of the United States today, exclusive of Alaska. The country over which it held sway embraced the territory now comprising Chihuahua, Coahuila, Sonora, Texas, New Mexico, Arizona, California and Colorado.

## Durango Also Rich in Mines.

Parral lies only a little north of the borders of the state of Durango, which is surpassed in the number of its mining properties, aggregating more than 4,000, by only two states in Mexico—Chihuahua and Sonora. Its natural resources include silver, gold, lead, tin, copper, sulphur and rubies. The state's wealth is not confined to minerals, however, for there are extensive forests of valuable timber and the agricultural resources are capable of almost unlimited development, while 1,000,000 head of stock find rich pasturage on its fertile tableland.

The Nazas river, which empties into Lake Habas, is the principal waterway of the state. It is known as the Nile of Durango. In the spring, as the snow melts the river inundates its valley, leaving a rich deposit of silt brought down from the mountains. After the waters have receded the land bursts into bloom like a miniature Egypt, cotton, barley and wheat grow-

ing in great luxuriance, while the whole landscape assumes the aspect of a flower garden.

One of the most interesting trees to be found on the mountain slopes of Durango is a species of pine, the needles of which the Indians and Mexicans boil and use as a remedy for stomach troubles. Its taste is like that of anise seed. The wood of these trees is much used by the Indians in the manufacture of their primitive violins.

One of the products indigenous to Durango, but one of which the state does not boast, is a venomous species of scorpion whose sting is almost invariably fatal in the warm regions of the state, but which is more painful than dangerous in the higher and cooler altitudes. In the vicinity of Durango City 60,000 of these spiders are killed annually, some of the natives making a business of destroying them, collecting from the municipality a bounty of one centavo per scorpion.

## City Has Wonderful Climate.

At an elevation of 5,000 feet, the city of Durango, capital of the state, enjoys a matchless climate, which has earned it the sobriquet, "town of sunshine." It is one of the oldest Spanish settlements in the republic, having been founded by Captain Ibarra two years before the followers of Don Pedro Menendez de Aviles initiated the permanent colonization of the United States at St. Augustine. The site of the present city was reached by the adventurer and silver-seeker, Mercado, who in 1552 discovered the famous Iron mountain of the suburbs. When Ibarra arrived with his colonists the country was occupied by nomadic savage tribes.

One of the odd customs of the Durango district is the funeral ceremony for children. "An angel is being buried" is the explanation which a native will give of a gay procession headed by a woman bearing aloft on a board a bundle bound in white. The parents of the child are obligated to give it joyfully to heaven, to the accompaniment of music and dancing. If there is weeping the baby cannot enter paradise until it has gathered all the tears.

One of the places of historic interest is the town of Santiago de Papasquiaro, said to derive its name from "paz quiero," meaning "I want peace." The phrase alludes to the defeat of the Indians following a massacre of the missionaries and a burning of the churches by the Tepehuanes and Tarahumares in 1616. After the outrage the Indians gathered a force estimated at 25,000 and marched on Durango City. The governor of the province, with 600 valiant whites, determined to resist and save the territory for Spain. In the battle which followed, the Spanish chroniclers declare, the governor completely overcame the insurgents, who lost 15,000 men. After this overwhelming defeat the Indians wanted peace.

Durango derives its name from the old Spanish town of that name, in the Basque provinces.

## Woman and the Arts.

In the minor art of dancing, and in the nobler work of reproducing the music of the great composers, and in acting the characters of the great dramatists, there are women of high, and even of highest rank. But to leave these more interpretive or reproductive arts, only in fiction does she approach the mark of men. For here she must be counted with the great of the craft. And even should some crabbed soul insist that the rare company in which are George Eliot, Jane Austen, George Sand, Madame de Staël, and the queen of Navarre, does not include the one who is greatest in the guild, yet there is no discomfort felt in naming these women along with Scott and Dickens, Hugo, Cervantes, and Boccaccio. But speak of the other creative arts, and we feel at once the chill. Chaminade looks ill at ease in the presence of Beethoven; Joanna Baillie, with Shakespeare; Angelika Kauffmann, with Michelangelo. —George M. Stratton, in Atlantic.

## He Sold.

He was trying to sell a dog, a bandy-legged brute, with features calculated to stop a motor car, and the old lady did not seem averse to buying one. Their ideas as to the brute's value scarcely corresponded, however, and there was little prospect of agreement, when suddenly the lady demanded: "Will he bite?"

"Only his meat, mum," responded the fancier.

"Oh, but I wanted one for tramps." "Tramps is his meat, mum," was the artful reply, and there was a deal after all.

## Indulge in Some Kind of Amusement

By EDWINA MARY LAYMAN, Colorado Agricultural College, Fort Collins, Colo.

Perhaps you don't want to play, or you think you're too old, or you say you've forgotten how! No one is too old, nor too stiff, no one "doesn't want to play," although there may be a few who think they've forgotten how. All the sorrows in life may be helped to be eliminated by some active form of play or pleasure. It is good for man to play and for the farmer most of all!

You say that you do not need exercise, but that is a wrong impression, for your daily work tends to make you stiff and does not develop the fine, delicate muscles that bring ease, grace and bodily control. All active out-of-door games tend to this development. Why not play with your wife, with your children, with your neighbor and make the most of what there is in life for you? For an hour after supper take time to play tennis, baseball, volley ball or some form of amusement in which you are particularly interested. Your work will hold a keener joy for you, for you will have unconsciously acquired the attitude of play toward it.

You can never take wealth nor material possessions with you when you leave this world, but you can give to it and gain from it much of pleasure in the pure enjoyment of the good and happy things of life. We were made to be happy, and the greatest material happiness comes through the enjoyment of some form of recreative sport, after a day of good work well done.

Don't sit on the side lines and watch! Come into the open and play! Drop your work for a few moments every day and play with your children, for verily a little child shall lead you back into that long-forgotten kingdom of early joys and greatest of opportunities, your youth and all it held for you.

## All Manly Sports Should Be Encouraged

By DR. JESSE F. WILLIAMS, Columbia University

Football and other manly sports involving the element of combat and emotional excitement should be encouraged as preparation for war. From the standpoint of biology and ethnology, man, as Doctor Crile has said, has a "kinetic" equipment for war, developed by the innumerable centuries during which he had to fight for his own life and the life of his mate and children. Now as civilization has more and more deprived man of the need to fight he has devoted more time and attention to the games which are substitutes for war in that they involve a vigorous struggle and in their sublimation offer an opportunity for the formation of habits and ideals of a kind which may effectively fight for personal and social ideals.

It is important, also, to remember that these games approaching war, involving a large element of personal danger, appeal most strongly to normal human instincts. There are those who see in football, even as those who see in war, only horrors and debasements. Such individuals are unable to see any values in the sacrifice of material interests for the sake of high ideals, of personal and individual elements for the good of the group.

Now games and athletic contests will give the essential virtues which may be achieved by war. Doctor Cannon of the department of physiology of Harvard university has shown from the standpoint of internal secretions and the emotions why games and athletics serve the body in the preservation of the warlike virtues. This scientific work on the physiological side shows how insignificant gymnastic drill is, because of its lack of the necessary emotional re-enforcement.

## New Yorkers Make Milk Supply Safe

By JULIUS HORTVET, Member of United States Joint Committee on Food Standards

All milk should be graded and sold under its proper label. All grades which contain over 100,000 bacteria a cubic centimeter should be permitted to be sold only as "raw milk." Pasteurization is defined as subjecting milk to not less than 145 degrees Fahrenheit for not less than thirty minutes. This process should be carried on under the supervision of local and state health officials. Pasteurized milk should be divided into three grades:

First, that which contains not more than 200,000 bacteria to the cubic centimeter before pasteurization and not more than 10,000 bacteria to the cubic centimeter when delivered to the consumer.

Second, that which contains not more than 1,000,000 bacteria a cubic centimeter before pasteurization nor more than 50,000 bacteria per cubic centimeter when delivered to the consumer.

Third, that which should be restricted in its use to cooking and manufacturing purposes only. Such milk should not contain more than 1,500,000 bacteria a cubic centimeter before pasteurization and not more than 300,000 after pasteurization.

These are the New York rules. Under them New Yorkers know when their milk is safe.

## Desire to Live Has Lesson for Mankind

By REV. SCOTT R. HYDE, Pastor of First Methodist Church, Winona, Wash.

To live is the common desire of men. Much of our modern life is lived on the low plane of mere physical existence. Christ came to set over against this low view of life the possibilities which inhere in the higher spiritual life of the soul. The spiritual must ever be the master of the physical. It is just here that we discover life's secret.

Our failure to put the emphasis where it belongs accounts for our extreme materialistic tendencies, which threaten the overflow of faith and the loss of the higher virtues of life. Much of our modern life is a mere surface existence. It is time we paused in our mad rush for material gain and seriously ask ourselves, "For what are we living; what is it that makes life worth while, if it is not a spiritual aim?"

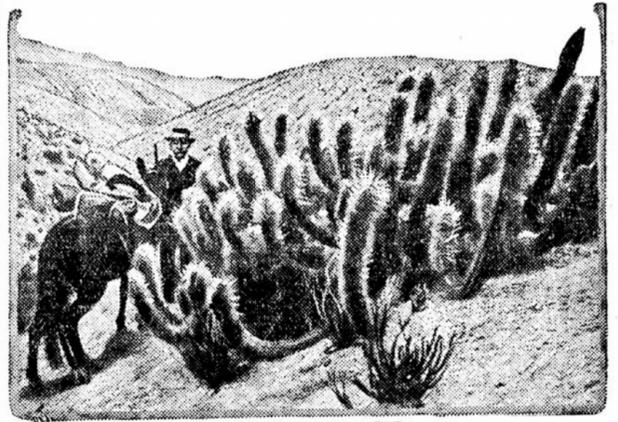
## Be Punctual At All Specified Times

By HERBERT SCHRECKE, Chicago

Where many employees report daily for work and ever so many continually arrive late, what are the results? The latter may vary, but to my knowledge generally the consequences are a bad reputation among one's friends. Whenever you attend for work on any kind of an assemblage, make it your first duty and aim to be prompt at the specified time and see how much more satisfied you will be. To be reliable here, there and everywhere will, as a general rule, distinguish one as a person of one's word.

It is never too late to start. May all who read this endeavor to see how prompt they can be, instead of tardy, at all affairs.

# South American Trails



THE HIGH DESERTS OF PERU

PROBABLY no place in the world gives the traveler more contrasts in trail, scenery and climate than do the Andes in the last range of the Cordillera. From the barren snow line at the ridge down to the headwaters of the great Amazon system is but a few hundred miles, yet in this distance four distinct changes in the fauna and flora are apparent. Starting over a hard open road where we made eighteen or twenty miles a day, the trail winds down through a rolling country until the last pass is crossed and the first signs of tropical vegetation appear, writes Lee Garnett Day, of the Collins-Day South American expedition, in the American Museum Journal. Then through the mountains of the Yungas the route lies over forested hill and dale or along narrow ledge trails, and eventually reaches lower planes where the freshets turn into narrow streams and the streams at last into rivers. Here amidst the most abundant tropical growth, the paths underfoot more often resembled swamps than terra firma and five or six miles were considered a good day's work. In fact, the stream beds often proved better trails than the machete-cut roads through the palm and canebrakes.

Crossing South America from Mollendo on the west coast to Para on the east, by far the most eventful part of the journey is the 500 miles by mule train from Cochabamba, high in the Cordillera, to Todos Santos, the headwaters of the Amazon, 3,400 miles above its mouth. Cochabamba itself is a city of 60,000 inhabitants, the greater number of whom has never left its suburbs. A railroad is in course of construction, but from Arque, the end of the rails, all commerce must pass by mule pack for two days over the boulders of the river bed. We reached Cochabamba from Mollendo by rail, lake steamer and coach. After crossing the first two ranges of the Cordillera by rail, we ascended the third by pack train starting from Cochabamba. Our party consisted of Messrs. Alfred Collins, Willard Walker, George K. Cherrie, Robert Boeker and the writer; and after securing 28 mules, a chief arriero or mule driver, and two Indian helpers, we started for the head of the pass and the tributaries of the great Amazon river beyond.

## Mule Trail Hard to Follow.

The mule trail from Cochabamba to Todos Santos is far from an easy one to follow, notwithstanding that it is constantly traveled, being the route for most of the commerce between the low hot grazing lands of Bolivia at the eastern base of the Andes, and the high, well-populated tablelands around La Paz, Cochabamba, Oruro and other cities. It is always very narrow, passes through heavy woods, over ridges, along sides of cliffs, up or down a stream, and is often difficult even to locate. Especially is this true in the rainy season when pools of mud and tangled roots incumber the way in the woods and mule drivers passing previously have often left the path in search of better going, thus making false trails unsafe to follow unless with a very experienced guide.

The short journey up from Cochabamba was hot and dry, over trails covered with white dust, but the last divide we crossed in a thick mist and turning due north from the Santa Cruz trail, seemed suddenly to have entered another country. Almost perpetual rain was now encountered, and the precipitous nature of the descent, about five thousand feet in twenty-four hours, made traveling decidedly uneasy and in parts dangerous, due to the paths being water courses from which all mold had been washed away. Wet slippery rocks and often quantities of loose, small boulders, made it necessary to walk most of the way, as the slipping of a mule on the steep incline might be fatal to both rider and animal.

## "Get Out If You Can."

At Sal-si-puede ("get out if you can")—there were many places to which this name was applicable—we had to dig or cut out a track along the face of a cliff where a slide had occurred, to make room for the pack animals to pass. This was not only difficult to do on account of the steep decline and precarious footing; but also the work had to be very well done because if the pack of a mule should catch against the side of the cliff in

transit, the animal would be tipped over into the River Espirito Santo a thousand feet below.

From Sal-si-puede onward the mules waded streams, floundered through mud to their middles and labored over fallen logs, often on a trail so narrow and so overgrown that it was necessary constantly to use the machete to clear the path of hanging vines and dense undergrowth. On one occasion after eight hours of scrambling and wading through mud and water, Mr. Cherrie's mule slipped in a deep pool of thin mud and became tangled in the roots at the bottom, pinning the foot of the rider under it. Mr. Cherrie was held up there deep in the mud until two mule drivers could return to extricate him.

The advantage of having compact units of baggage was made evident in this locality. The jamming of baggage between saplings or in a washed-out gully would necessitate a halt and while the load on the mule that had caused the halt was being re cinched, a dozen other mules would start exploring the neighboring thickets. Sometimes the whole train would be thrown into confusion and all the pack animals would have to be rounded up and the packs readjusted.

## Animal and Bird Life.

There were no wild animals of a kind to be feared by man along this route. Along the banks of the Chapare we found evidences of tapir, paca, capybara, jaguar, tiger cat, peccary, deer, coat, agouti and others, but the high water, which varies sometimes forty feet between seasons, had driven game to the highlands, making hunting possible only at the highest points along the Mamore. Bird life was most abundant in Bolivia; a collector could spend several seasons to advantage in these little-traversed routes across the South American states. When the incidental mishaps and inconveniences are forgotten, the Bolivian Yungas between Todos Santos and the Chapare may well be compared with other natural wonders. Daily the vistas of palm, fern and floral growth, with cascades, waterfalls and freshets, make a delightful background for the abundant bird and other animal life.

At the beginning of the Chapare the Yungas disappeared and our arriero now led the way down the river bed, or through the cane and bamboo brakes, pushing on through mud and water. Due to good chance our camps remained above water except in two instances. One night in particular the rains filled the Espirito Santo and San Antonio rivers and left us in three feet of water at daybreak.

## Snails Very Nutritious.

"All snails are edible and nutritious," says Canon Hersley in a book on British land and fresh water molluscs, just published. He goes on to say that even the common or garden snail, though insipid, is as nourishing as calf's-foot jelly.

There is a large white-shelled snail called Helix pomatia that is commonly eaten by connoisseurs in the South of England, while all over France, Italy and Spain several species are used as food. In France there are many small farms which yield a good profit to their owners. In the French and Italian quarters of New York snails may be bought, either alive or cooked, and at most of the French restaurants they are served, "escargots farcis" being the most usual form of dish.

Snails are easy to raise in large quantities. They need lime for making their shells, but they do not have to be fed, as they can find their own food, which is exclusively the leaves of many plants. They are most delicious when properly prepared and cooked, and, as Canon Hersley says, as nourishing as calf's-foot jelly.

## Something Accomplished.

"Do you think it does any good to express your feelings on the telephone?" "Well, it may help to cheer the operator by giving her a few laughs if she happens to overhear you."

## Geographically Speaking.

"I have just finished Lansing, Mich.," said the surgeon. "And I," said the carpenter, "am now engaged in Maccon, Ga." "Wheeling, W. Va., is my next job," said the man with the wheelbarrow.