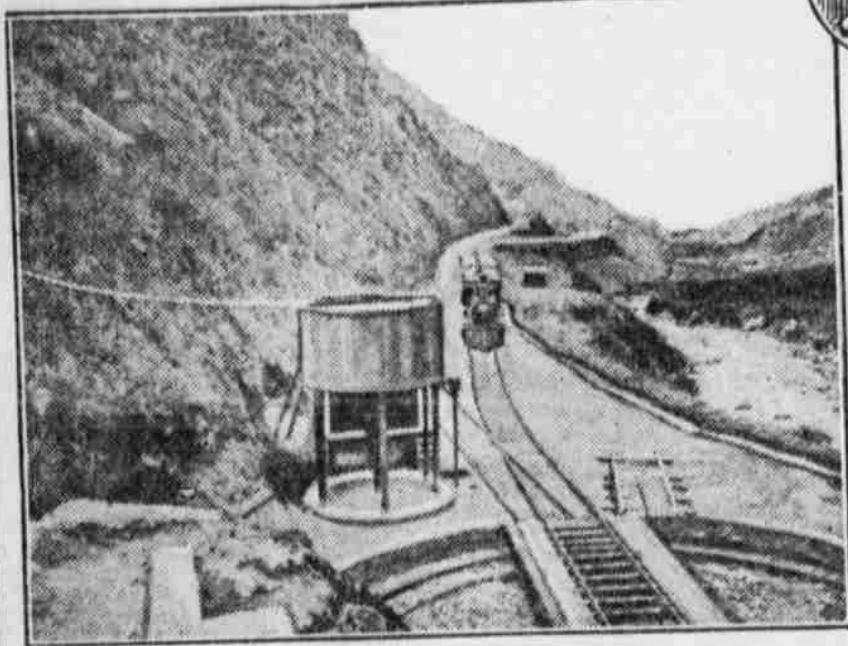


# COASTING FROM SKY TO SEA



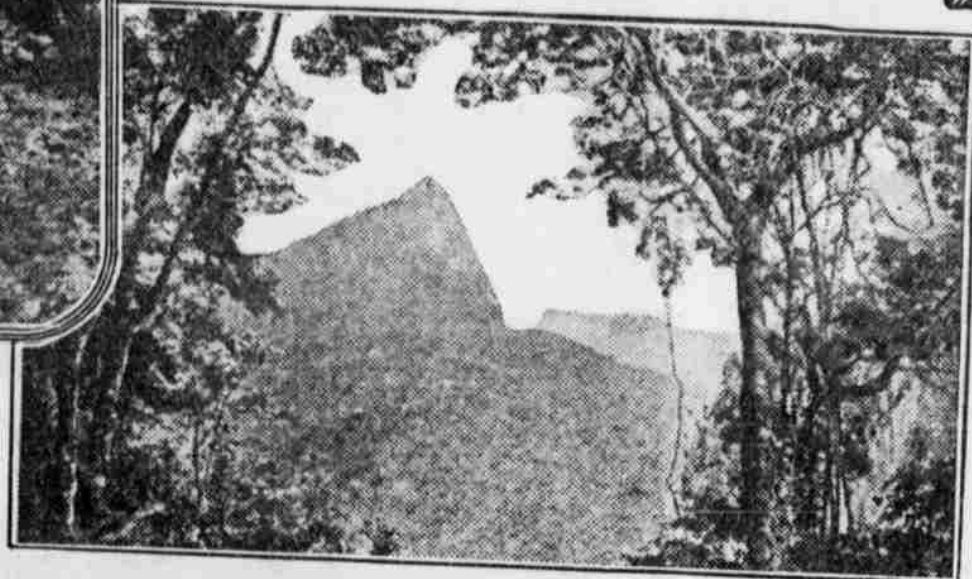
WATER TANK AND TURNTABLE ON THE OROYA RAILROAD IN PERU



A HAND CAR ON THE OROYA RAILROAD



AN EARLY METHOD OF WORKING THE LAND



VIEW IN THE ANDES MOUNTAINS



AN ANCIENT INDIAN VILLAGE

**T**HINK of a continuous, thrilling, terrifying swoop of 100 miles in a hand car from the top of a snow-clad mountain, over three miles high, to the shore of a tropical sea! Such an experience causes one years afterwards, merely upon thinking about it, to catch one's breath and one's heart to miss a beat or two, writes James Gordon Stuse, U. S. A., in the Pan-American Union.

But it is impossible, do I hear you say? Just a moment, while I quote you a few, a very few, facts and figures. The Oroya railway (El Ferrocarril Central del Peru) is a monument to the genius of Henry Meiggs, an American, or, rather, I should say, a United States-of-North-American, for in the southern hemisphere the term "American" is not very definite, and we usually find ourselves indexed under "N" to distinguish us from the United States of Colombia, United Mexican States, etc. Callao, the Pacific terminus of the Oroya railway, and one of the principal ports of Peru, is six days by boat south of Panama.

Lima, the "City of Kings," Peru's capital, is six miles from Callao, and is located on a broad tableland about five hundred feet above the sea. The opening of the Panama canal will undoubtedly stimulate travel to South America, and of all parts of the continent Peru is wonderfully rich in natural wonders and historical background.

The Oroya railway was begun in 1869. Beginning at Callao it climbs steadily to an elevation of 15,665 feet above sea level, where the divide is crossed through the Galera tunnel, at mile 106. The Morococha branch rises to elevation 15,865—the highest point reached by any railroad in the world. At Oroya, mile 138, the road divides, one branch going north to the famous Cerro de Pasco copper mines, the other 80 miles south to Huanuco, with a projected extension to Cuzco, the old Inca capital, which has had rail connection with the sea at Mollendo for several years. Another branch, about three hundred miles long, is under construction down the eastern slope of the Andes to the head of navigation on the Ucayali river, one of the important upper tributaries of the Amazon.

The Oroya road is not only the highest in the world, but there is no other which lifts its breathless passengers to any such altitude in such an appallingly short distance. To climb as the Oroya climbs, a Hudson river train leaving New York city would have to ascend half an hour before it reached Albany, a distance 1,000 feet greater than that from sea level to the summit of Pikes Peak. The daily passenger train leaves Callao in the forenoon and reaches Oroya late in the afternoon. As there are no night trains on account of the great danger of rocks falling down in the track, the round trip ordinarily requires two days. Since there is a continuous downgrade from the Galera tunnel to the sea, an opportunity is offered for the most unique hand-car ride in the world.

Through the courtesy of the general manager of the line we were afforded exceptional facilities for making the trip. His private car was attached to the evening train for Chosica, a fashionable resort about thirty-five miles out of Lima, at an elevation of about two thousand eight hundred feet. For an hour or so we wound through a wide irrigated valley, fat and prosperous looking, with plantations of sugar cane and cotton fenced in by mud walls, the roofs of haciendas showing now and then over the green. Beyond that the bare brown mountains—high enough, it seemed, yet really no more than foothills—shut in and shouldered upward tier on tier behind each other, yellow and terra cotta and tawny brown, occasionally flashing through a slit in their flanks the snowy shoulders of peaks miles and miles away, to which we were to climb. At Chosica our car was sidetracked for the night, dinner was served aboard, and we turned in to be ready for an early start the next morning.

About 4 a. m. we were awakened by our car being picked up by the morning freight, whose schedule had been advanced several hours for our special benefit. The real climb now began.

The broad valley soon narrowed, the naked rocks closed in, and we were fairly in the canyon of the Rio Rimac. Twelve miles out of Chosica an elevation of 5,000 feet was reached at San Bartolome. Here is the first switchback, Meiggs' original device, which enables a train to zigzag up the face of a canyon wall without resorting to abnormally heavy grades and rack and cog systems.

At Matucana, 7,700 feet above the sea, the hand car, which was to be our means of descending, was trailed on behind. Our Indian cook now brought in coffee, prepared in the Peruvian style, which was very acceptable, as the air was quite chill. Then the climb continued over spider-web bridges, more switchbacks, and numerous tunnels, the tunnels of the Infernillo (Little Hell) opening at either end of a bridge spanning a chasm over one thousand feet deep. As the train wound and creaked along the forehead of the mountain one could look down on the roofs of villages miles below, and people and ant donkey trains, and the multitudinous little fields fenced in with thick mud walls, which made the valley floor a gigantic waffle iron. Above them, on a level with one's eyes, and up and up, seemingly to the very top of some of the mountains, were the old terraced fields of the ancient Incas, grass-grown now with the turf of centuries. The old terraces are mostly in disuse now, but the fields and groves of the lower levels still use some of the old irrigation troughs. They were cut in the rocks by a people who knew neither cement nor iron pipe, but they follow the contours as though plotted with a transit. Sometimes, as the cars creep along a canyon wall half way to the top, one can follow the silvery ribbon of water for miles along the face of the yellow rock.

More bridges, more switchbacks, and ever the air grows clearer and thinner and colder. The fields and gardens are gone now, the bleak tableland country appears, and people whose hearts or nerves are bothersome would begin to have sorrows. Below crawled burros and llama trains carrying silver and copper ore. At Casapalca, 13,600 feet, is the big smelter of this neighborhood. Here was a mud corral full of llamas, those absurd-looking animals, seemingly a cross between a sheep, a camel, and an ostrich, which viewed the noisy industry with their looks of timorous disdain.

Fourteen thousand—the chimneys of Casapalca's smelters were plus stuck in the carpet of the valley miles below—15,000—600 more, and the train climbed up and over, and rested on the top of the cold, wind-swept, Andean roof. All about were peaks and blankets of snow. One rose painstakingly and walked with care. Fifteen thousand feet is a good bit of a jump to take before breakfast. Behind the station Mount Meiggs climbs up another 2,000 feet, whence, through air so crystalline that one might fancy one could walk to the summit in half an hour, it

looks down on both sides of the divide. To the west is the long descent, to the east the chilly plateaus and snow valleys of the Andean treasure land.

It was now noon, and, in spite of the unaccustomed altitude, we ate a hearty Peruvian breakfast, consisting of soup, salad, several meat courses, vegetables, wine, and fresh strawberries and cream. Leaving the general manager's car to be brought back by the next down train, we transferred to the hand car and pushed off. The experiences of the next four hours are too kaleidoscopic for accurate or detailed description. We started amid snow and ice, bundled up in sweaters, overcoats, and blankets, and landed in lemon and orange groves four hours later. Continuously before us unrolled a grand panorama, ever changing and ever more wonderful. Where as our train had painfully toiled upward foot by foot, we now seemed to rush down a mile at a swoop. But two stops were made in the 106 miles, once for a section gang repairing track in a tunnel and again to let the up-passenger train by. Going at breakneck speed, our hand car rushed out of one black tunnel, across a swaying bridge strung over the chasm of the Rio Rimac, and into the darkness of another tunnel cut out of the sheer face of the cliff. As we careened across the Infernillo bridge, one of our party aptly described his impressions as a "flash of daylight accompanied by a sinking of the heart."

In all we rushed through 47 tunnels, crossed a dozen flimsy-looking bridges, and slowed down for eight switchbacks. The fastest kilometer was made in 56 seconds (about 40 miles per hour), and the fastest single stretch of 27 kilometers in 29 minutes (about 35 miles per hour). When one considers the steep grades and the sharp curves necessary to get a railroad through such a canyon, the fact that our light hand car, traveling at such a speed and controlled only by a hand brake, stayed on the rails, is the best evidence in the world of the excellent construction of the line and of the vigilance of the maintenance force. During our tour of South America we had many strange and interesting experiences, but none for novelty, thrill, and magnificence to compare with the hand-car coast down the Oroya railway.

## LESSENING DELIGHT.

"I'll never forget the thrill that was given me by my first velocipede," said the man of millions. "Only exceeded, I dare say, by the thrill given by your first bicycle," remarked his friend. "Quite so. I wish I could have got half as much pleasure out of my first automobile."

## NOT HEROIC.

"It's no harm to dance, father. Dancin' men are in great demand these days." "What you say is quite true, my son, but you devote too much time to it. Have you ever seen a monument that was erected to anybody simply because he was light on his feet?"

## JUST SO.

"I'm new in the cigar business, so I'm trying to familiarize myself with the various brands." "Learning the ropes, so to speak."

## THE BARGAIN COUNTER.

The Butcher—I have some fine canvasbacks to-day, ma'am. Mrs. Newlywed—Do you sell them by the yard?

# OUT-OF-ORDINARY PEOPLE

## BEARS A HEAVY LOAD



The imperturbable Robert Lansing, counselor for the state department, is an official on whose shoulders in these troubled days rests a heavy load of responsibility.

It is no secret to any of those familiar with the foreign affairs of the United States that President Wilson is taking a large hand in the conduct of these affairs. It has been said with basis that the president is, in a large measure, his own state department.

But while this is true, it also is true that on the counselor there devolves a burden such as not many officials would be willing to assume. The international sky since last July has been not only a stormy one for the belligerents of Europe, but it has also been cloudy for the United States.

Nobody questions the fact that Mr. Lansing is an expert in international law and an authority on diplomatic matters. Besides this, he has the faculty of keeping his poise and

not losing his head. He takes the onerous duties of his place coolly and calmly, gets grilled by newspaper men daily, and, if he is ever ruffled manages not to show it. In the sense that the most important notes to the foreign powers these days are visced and sometimes modified by the White House, the president may be said to shape them, but their original preparation is the work of Mr. Lansing.

## BELIEVES IN ATTACKING

Rear Admiral John M. de Robeck, who succeeded Admiral Carden in command of the allied fleet attacking the Dardanelles, has been little known to the world at large, or even to Great Britain, whose navy he entered in 1875, when he was but thirteen years old. He became a rear admiral in 1911, and the next year he was made admiral of patrols, a post calculated to give scope to all the talents. It means a full acquaintance with every form of small craft, with mines and mining, with the launching of torpedoes from the shore, with intricate questions of the correlation of land and sea gun-fire.

Rear Admiral de Robeck is a man of rather more than middle age; his great youthfulness lies in his ability to grasp the significance of the latest naval notion. Time and again, in messroom gatherings, he has made younger men seem old fashioned by comparison. De Robeck is known to be "advanced"—as far advanced as the youngest German engineer within range of his big guns. Forty years of service have not staled his delight in experiment and practice. He has never been the drudge of stationary convictions, for he feels that no one man has time to grow sure about the experimental science of the sea before he is obliged to shift his ground. He is a member of the Army and Navy club, but knows the dangers of arm-chair certitudes. One of his maxims is that the man who spends his life inventing a torpedo net is more likely to be blown up than the man who fires the torpedo. To attack, and keep attacking, is an article of faith with him.



## CAMDEN BOOSTS FARMING



"The exodus from the farm must be stopped," says Senator Johnson N. Camden of Kentucky, whose own 2,000-acre farm is one of the show places of the bluegrass region. "Rural social conditions must be improved and made as attractive in their way as city life. Unless the restlessness and discontent of the boys and girls on the farm is overcome, no one can tell what the end will be."

"But how is this most difficult problem to be solved?" he was asked.

"By devising means to increase wealth on the farm," replied Senator Camden. "This can be accomplished by improved methods of production, increased farm yields and better methods of distribution. With increased wealth will come better social, educational and religious facilities. With more comforts will come greater contentment."

Here are the remedies which Senator Camden suggests:

"Co-operation between the farmer, the merchant and the banker. "Finally, organized unselfishness, since selfishness has been organized for a long time."

"Public spirit and a broad vision will do for rural communities what it has accomplished for thriving and progressive urban communities."

## HEADS WOMAN WARRIORS

The Women's Volunteer Reserve, organized by Viscountess Castlereagh, whose object is to defend the homes of the English nation against the expected German invasion, has acquired additional prestige, since Lady Castlereagh, the colonel in chief, through the death of her father-in-law, has become the marchioness of Londonderry.

At the war office of the W. V. R. in Baker street curious crowds have watched the former Lady Castlereagh arrive every day, attired in khaki, to spend many hours at her desk perfecting by correspondence the details of the movement, which she intends shall extend throughout the whole of Great Britain. Londonderry house, one of the most splendid mansions of the metropolis, where the new marchioness is mistress, is now the headquarters for fashionable enlistments, the leaders of society having been somewhat timid in lending their names to an organization which takes in many of the most violent of the militant suffragettes.

The government has no intention of allowing the women to bear arms, but lets them be trained to act as drivers of motor cars, cooks in the camps, bearers of dispatches and telegraphers to transmit army messages; to relieve men assigned to such duties in case of need.

