AN OASIS REPUBLIC.

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B ENI OUNIF, Algeria, --I have just returned from the great oasis of Figuig, on the boundary between Algeria and Morocco. It lies here in the heart of the Sahara desert, 400 miles south of the Mediterranean and 1,160 miles from Timbuktu, in the French Soudan. If I should go west-ward through Morocco about as far as from New York to Pittsburg, I would ENI OUNIF, Algeria,--I have just

half an hour later by the thick sky which has ended tonight in the sirocco, or windstorm, of the desert.



UNIQUE WATCH TOWER.

Built Against Date Trees and Photographed for the Saturday News by Frank G. Carpenter.

strike the port of Mogador, on the At-lantic ocean, and if I took camels and traveled to the east I should have to go through the Sahara for a distance as great as from Philadelphia to Salt Lake City before I found anything green and came to the valley of the Nile.

A CARAVAN CENTER.

Figuig has long been a caravan cen-ter, and today the freight from a large number of oases is shipped here on camels. This is so of Tafilet, in Morocco, from where the best dates come, and of Twat, a large collection of oases in the Algerian Sahara, now controlled In the Algeman Sanara, now controlled by the French, three or four hundred miles to the south of us. Some of this freight still goes to Figuig, but a large part of it has been diverted to Colomb Bechar and Beni Ounif, to be sent northward by the new railroad.

northward by the new railroad. This point is about as far north as camels can come without danger of catching cold. If they go farther they get sick and die. For this reason the goods from other cases were once brought here and then sent to the Med-darkers or mules. The iterranean on donkeys or mules. The exchanges were made at Figuig and this caused it to become a commercial center. Its merchants were noted as some of the shrewdest of the Sahara, and they sent regular caravans to Tiencen and to Melilla, in Spanish Africa, on the ______terranean sea. About three years ago the French completed their railroad to this point and Figuig is rapidly losing its trade.

ed, trotted and galloped, and at irreg-ular intervals acted worse than the av-erage western broncho when ridden by a tenderfoot. We managed to keep our seats, however, notwithstanding the our seats, however, notwithstanding the stony desert and the winding walls of the cases inclosures. It took us about an hour to reach the Moroccan fron-tier. We crossed it from Algeria be-tween two high brown rocky mountains, and at once entered a beautiful valley filled with thousands of date palms.

THE OASIS OF FIGUIG.

It Has Seven Mud Villages with Streets Like Catacombs-One Million Date Palms Watered by Hot Springs-A Vast System of Irrigation by Underground Pipes-Taking Tea With the Moors-Frank G. Carpenter Makes a Trip Across the Desert From Algeria into Morocco on a Bucking Arabian Colt-His Guard of Soldiers Furnished By the French.

bear dates. The trees are about at night by rough doors of palm wood inches in diameter, and they hung on rude wooden hinges. There

Outside the date plantations were un-irrigated fields in which grain had been planted to take advantage of the slight rainfall which comes here near the mountains during certain months of the year. I believe that these fields are also given some water from the also given some water from the springs.

THE LUMBER OF THE OASES.

THE LUMBER OF THE OASES. As we went on with our journey, we could see how important the date paim is to these people of the desert. It is their bread, firewood and lumber. The ditches here and there crossed the streets and in such cases there were bridges of paim wood. I observed the doors which go into the walls of the date gardens. Each has but one and that not higher than my waist. In-deed, some doors are so low that the common razor-back hog would lose his bristles if he should try to go through them. These gates are of paim planks; they are sawed out by hand and pegged rudely together. The date tree forms the pillars which up-hold the house roofs, it is used as beams and rafters and it is made into ladders for the watch towers. These is more or less paim wood in them, and the platforms, on which the spies sit at time of date harvest to guard the crop against thieves, are of the same material.

I was much interested in the palm trees. They look ragged and rough. On the taller trees there are no leaves except at the top, and I am told that each ring of bark represents a year's growth. If this is true many of the palms must be a century old. They begin to bear at 10 or 12 years and yield crops thereafter every two years. The dates here are not as good as those of some other parts of the Sahara. There are better ones in Tuat, in Tougurt and in Biskra. I shall learn more about them as I go on with my travels.

THE OASIS OF FIGUIG. This was the oasis of Figuig. It con-sists of this valley and has great date plantations. Standing at the entrance, between Mount Taria and Mount Zen-aga, each a barren rocky brown mass about 6,000 feet high, we could see a forest of green-leaved palms, ranging in width from two to three miles and extending up a ravine for a distance of seven miles or more. On both sides and beyond were nothing but sand, rocks and mountains, perfectly bare, thirsty and dry. The palms formed a great green sheet in this setting, with round brown watch towers made of sun-dried brick and the yellow minarets of the village mosques rising above them. On a hill in the center we could see the mud houses of the village Zen-ner, but the other towns of the easis They are named El Maiz Foukani, El Maiz Tahtani, El Hamman Foukani and El Hamman Tahtani. and 5.1 Hamman Tantani. These seven Figuig villages have al-together about 15,000 inhabitants. They are separate towns, but together con-stitute a little United States of their own, with a congress but no president. Each village governs itself and a com-mon council of the combined villages. Each village governs itself and a com-mon council of the combined villages governs the cases. The village govern-ments each consist of a council of 17 members, five of whom are land own-ers and 12 of whom are laborers. They are all elected by the people of the vil-lage. Three members of each council

they are entered only by low doors of paim wood. In some of the wider streets ledges have been built along the

walls, and upon these shrouded figures lie and sleep or sit cross-legged and chat. Here and there men squat on the chat. Here and there men squat on the ground, hugging the walls while work-ing away at their trades. I noticed several tailors making gowns, a cob-bler or so sewing on yellow slippers, and also one or two peddlers. There were many little boys with sore heads closely shaven, and sore eyes with files playing about them. They stopped and stared at us, and as we passed many Arabs with heards scowled at us and Arabs with beards scowled at us and the camera. There were no women to be seen, although I now and then caught a glimpse of sheeted figures which ran out of our way. In the Jew-ish quarter I saw some bare-faced girls with earrings as big around as the bot-tom of a pint cup. The Jewish men were dressed like the Arabs.

WITH THE MOORS AT HOME.

The town of Zenaga, which we next visited, was of about the same char-acter as El Abid, save that its streets were a little wider and it had a busi-ness section. This ran about a square which could not have covered more than a quarter of an acre. I have seen many a stable yard quite as large. Around this were a number of small stores with a motley crowd of Arabs shopping and chatting outside them. Some of the men were buying wool and others sugar and tea. The average store was not much bigger The town of Zenaga, which we next

he might go in and tell his women to go to their own quarters as strange men were coming.

A moment later the door was open-ed. We first entered a courtyard roofed by the sky and surrounded by stables. In one stall there was a loom at which a woman had been weaving a blanket and in another a boy was cutting up palm roots for firewood. This court was surrounded by mud

This court was surrounded by mud buildings about 40 feet high. They were of two stories with a gallery running around the second floor. These buildings contained the living rooms of the family, all of which faced on the gallery. Such rooms are used chiefly for sitting or loading, the sleeping places being on the roof. Ex-cept when the weather is bad all Figuig sleeps with only the sky for a cover, and the whole population thus practises the open air cure.

practises the open air cure. Crossing the yard, we were taken up to the second floor into what I suppose was the best room of the house. It was about 20 feet square, with a celling at least 25 feet in height. The walls were whitewash-ed and the celling was decorated with raim leaves dyed rod and green. The room seemed well lighted, although it had only one littles window high up in the wall. This had no glass and it was barred with iron. With the sin-gie exception of a rug about as big as a bed quilt there was no furniture. There was not even a divan built out from the wall as in some Moorish houses. The room was perfectly bare.

TEA A LA FIGUIG.

TEA A LA FIGUIG. Nevertheless our host seemed to think his house very fine, and I doubt not that the rug was better than those of many other homes in the town. He motioned us to sit down upon it, and then fearing that we might not be comfortable with our legs under us he had several soap boxes brought in and asked us to sit upon them. We preferred the rug. After we had taken our seats about a half dozen dark faced, bearded men, relatives and friends of our host, came in and were introduced to us. They were all Arabs, and we sat together cross-legged upon the rug. After a short time a slave appear-

The town of Zenaga, which we next visited, was of about the same char, acter as El Abid, save that its streetar, were a little wider and it had a bust-mess section. This ran about a square which could not have covered more than a quarter of an acre. I have seen many a stable yard quite as large. Around this were a number of small stores with a motley crowd of Arabs shopping and chatting outside them. Some of the men were buying wool and others sugar and tea. The average store was not much bigger than a good sized dog kennel and the customers stood in the street as they bargained. Here we left our horses in charge of the soldiers; and, at the suggestion of Mr. Pascalet, visited one of the principal citizens, a merchant of wealth. He was probably worth \$500. We met our host in the square I have just referred to, and went with him to his house. We ware told to wait a



A VISIT TO FIGUIG, IN THE WILDS OF THE WESTERN SAHARA. drank the tea the tea a delicious flavor. It was not e did so. Our cond rot and a ok three glasses . The mint gave tea I have tasted. FRANK G. CARPENTER.

ed them round. We drank the tea slowly, chatting as we did so. Our host then made a second pet and a third, and we each took three glasses as etiquette prescribes. The mint gave 1

least money.

pigment, gallon for gallon, it makes the best paint for the

MONARCH HARDWARE CO., SALT LAKE CITY.

KINLOCH PAINT COMPANY

THE HEART OF THE DESERT.

I wish I could take you across the desert as I saw it today. My surround-ings here are so different from anything we have in America that I almost des-pair of making my picture a live one. You must first imagine the bluest of blue sites out of work schemes des blue skies, out of which shines a daz-zling white sun, whose heat is tem-pered by the strong winds which blow pered by the strong winds which blow over the desert almost as regularly as over the sea. The air is so clear that we can see for mlles; and upon all sides there are ragged brown mountains in view. Here and there among them there are patches of stony white sand, some as bare as the seashore and oth-ers showing little patches of thorny streen bushes. We start out from sent ers showing little patches of thorny green bushes. We start out from seni Ounif, a fortified town with many French soldiers and crowds of Moors, Arabs and Berbers. Camel troops are making their way through the streets, officers in uniform dash here and there on Arabian heres, and cornering of officers in uniform dash here and there on Arabian horses, and companies of soldiers, in bright reds and blues, are marching this way and that. This is one of the wildest parts of the Sahara and its people are only held in check by the military forces. Farther eastward in the Algerian desert conditions are safer, but here, on the edge of Moroe-co, no one dares to go about without arms, and just over those mountains the lone traveler would almost surely be killed.

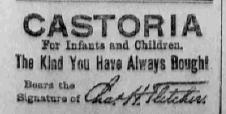
ACROSS THE DESERT GUARDED BY SOLDIERS.

BY SOLDIERS. Indeed, it is impossible to visit the oasis of Figuig without an armed es-cort. Foreigners have been badly treat-ed there in the past, and the Christian who ventured there a few years ago took his life in his hands. The French Sovernment will not permit travelers from here to go alone into Morocco, and it was only upon my showing Capt. Fariel, the chief of the Arabian bu-reau, a letter which I have from our secretary of war to the governor gen-cral of Algeria that two Arab soldiers were detailed to accompany us. These men were armed with repeat-ing rifles. They rode Arabian horses and kept right in front or close behind us during our journey. In addition to them I had with me my son Jack and Mr. Pascalet, the proprietor of the Ho-tel du Sahara and one of the leading

Mr. Pascalet, the proprietor of the Ho-tel du Sahara and one of the leading microhants of this part of the world. Mr. Pascalet speaks Arabic as well a. French and English, and he acted as our guide and interpreter during the day. He has a branch store in one of the largest of the Figuig villages and has many friends among the people.

BUCKING ARABIAN COLTS.

We started at daybreak. The sun was just rising as we left Benl Ounif. It came up a red copper ball out of the eastern horizon, and in a few moments took on a white heat, only to be lost



arean. On a nin in the center we could see the mud houses of the village Zen-aga, but the other towns of the oasis were hidden in the forest of paims. This oasis has, I am told, about the largest number of paims in one solid block of any in the Sahara, Mr. Pasblock of any in the Sahara. Mr. Pas-calet thinks there are more than a mil-lion trees, and I am sure I saw two or three hundred thousand lying in front of and below me as I stood on the Jorf, one of the highest parts of the oasis.

FED BY HOT SPRINGS.

Many of the cases of the Sahara lie Many of the oases of the Sahara lie along dried-up water courses, which are flooded during a part of the year. Fi-guig is fed by hot springs, which rise out of a hill in almost the center, and are conducted by underground drains about a foot square, made of stones and cement, through the 15,000 or 20,000 acres which are covered by these trees. Some of these springs are lukewarm and others have a temperature of about 100 degrees Fahrenheit. 100 degrees Fahrenheit.

100 degrees Fahrenheit. There are seven villages in the oasis, and the largest of these springs are found in the date plantations on the highlands of the town of El Abid, in about the center of the oasis. Who first constructed these underground drains which carry the water from level to level no one seems to know. Mr. Pascalet has asked many of the Arabs, but their only reply is: "We do not know when they were built, but it was many, many years ago." It may have been ionger, but how long no one knows. no one knows. Those drains are kept in order today

Those drains are kept in order today and new ones are constructed from time to time. There must be hundreds of miles of them for they reach ave-ry part of the oasis, being connected in each of the village plantations by great reservoirs where the water is stored when not needed for irrigation. Each tree, I am told gets a good drink at least twice a week. During my stay I visited El Abid and these springs. The palms grow all about them. In some places they are only two or three feet apart, and the branches meet overhead shutting out thes and others in wells or square tanks. During our visit the Arabs were bathing in one of the springs, and crowds of white gowned men with rags about their heads looked out at me over their long beards as I took these notes. At one place Jack attempted to take a photograph of them, but the Arabs protested and looked angry, only to smile again when Mr. Pascalet told

Arabs protested and looked angry, only to smile again when Mr. Pascalet told them that we were taking pictures of the paims and springs, only; and that we had very good-looking men in France and America and hence did not need to take home pictures of the natives of Figuig. OV8.

AMONG THE DATE PLANTATIONS.

lage. Infree memors of each council are elected to a general council of 21, which passes only upon matters which relate to the whole corporation of Fig-uig. The village councils regulate all things affecting their respective villages. They appoint the local judges of peace and war with villages outside Figuig, these are dealt with by the oases council, and the same body regu-lates all matters regarding the water

supply.

IN EL ABID. But come with me and look at one of these cases communities. We shall go through the town of El Abid, observthrough the town of El Abid, observ-ing some of the things I saw there this afternoon. The municipality contains about 2,000 souls, but it is nothing like any town of that size in our country. In the first place I doubt whether it covers more than 20 acres; and, as one looks at it through the palm trees, he may after the wurd will work in alors sees only the mud walls which inclose it, with the flat-roofed, windowless mud

buildings rising here and there above We enter the town by a gate in the wall. It is not over 10 feet high and above five feet in width, and it is shut

If Women Only Knew. What a Heap of Happiness it Would Bring to Salt Lake City Homes

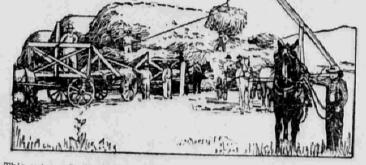
Hard to do housework with an achng back

Brings you hours of misery at let ure or at work. If women only knew the cause-that Backache pains come from sick kid.

'Twould save much needless woe.

Doan's Kidney Pills cure sick kidneys.

Salt Lake City people endorse this: AMONG THE DATE PLANTATIONS. Fifteen thousand acres is a pretty big farm, and, as I estimated it, that is fust about the extent of these oases. This Figula farm, however, is like nothing you can imagine. It is divided up into little pans or gardens, each of which is a date plantation, Many of the holdings are not more than a quar-ter of an acre in size and each is sur-rounded by walls from eight to twelve feet in height. The walls are of sun-dried brick, plastered with mud; and they usually face upon the roads, so narrow that as I rode on my horse through them I could easily touch the mud bricks on both sides. Here and there, a wall was broken at the top and I could look over and see the date trees and the gardens within. Many of the date paims reach high above the wall, but others are not more the wall, but others are not trees than tix feet in height and still Mrs. H. H. Balmsorth, living at \$35



This cut, made for Young & Winger, shows the Bigby Bros. putting up al-falfa on their farm, on the bench just outside of Teton canyon. There are three stacks finished, with a fourth well under way. These stacks are taken from 45 acres of ground, lucern and timothy, raised from the first crop. When the fourth stack was finished, they measured, after settling 60 days, 113 tons from one cutting. This yield is a fair average of bench land production throughout the valley. The second crop, if properly handled, yields about half or two-thirds as much as the first.

or two-thrus as much as the hrst. The soil of these bench lands is usually of a heavy black loam, gently sloping towards the center of the valley. The pure, fresh mountain water that flows out over these benches would be an inspiring sight to the drouth-strick-en regions of southern Utah. Alkali is unknown, and crop failures are abso-lutely unnecessary. In 15 years I have never seen a crop failure on this farm, when the crops were properly attended to. Bestdes large yields of hay and grain we raise nonles, plums and cherries

Besides large yields of hay and grain we raise apples, plums and cherries. Small fruit and vegetables are an assured success. We quote from an edi-torial in the Deseret News:

"At a recent visit to the Teton Valley, on the eastern bench, we saw gar-dens teeming with choice vegetables of great size, raspberries of excellent fla-vor, the bushes taller than most men, apples in profusion on thrifty trees, cu-cumbers ready for use, small fruits, rich and plenty, flowers in startling bright colors, and cows and calves were fat and fine, and the pure, bracing air seemed charged with life and force."

Also we have the best range left in th United States and always will have, protected as it is by the Government—in the interest of Bonifide settlers. Our flock-masters are gotting rich without taking chances of anxious loss, for these reasons: They live near the range, feed good hay in the winter seasons, cat-tle and sheep grow larger, sheep clip nearly enough wool extra to pay for the hay they eat.

Altogether conditions are most favorable to the stock grower. Any young man who is willing to work may, by the investment of a small amount of money, become independent in a few years. Land and water sells from \$10 to \$25 per acre. For information address

