FRANCE'S WAR IN AFRICA.

A Campaign That Has Placed Dahomey at Her Mercy.

King Behanzin's Desperate Struggle to Keep His Throne—Fortifications Thrown Across the Route of the Invaders at a Dozen Places—The Natives Aim Badly but Fight With the Greatest Courage.

It is over three months since France began her second war with Dahomey. Col. Dodds led into the field nearly 4,000 soldiers, mostly Senegalese and Porto Novans, With only 125 miles between his camp on the coast and Abomey he advanced with the greatest caution, and in the last half of his journey the desperate enemy contested nearly every step of the way. Col. Dodds has always been noted for careful attention to the well being of his troops. In one of his expeditions against Senegambian rebels, a few years ago, he provided camels for all his European soldiers that he might spare them the terrible discomfort of tramping in that tropical region. After some of his hardest fights with the Amazons of King Behanzin, Col. Dodds kept quietly in camp for a day or two to let his men rest. Sometimes also he found it necessary to halt for a few days in order that his porters, several thousa d in number, who carried food for the army, could go to Porto Novo and return with fresh supplies.

Col. Dodds began on Aug. 17 to ascend the Wheme River. This is the first time the Wheme has been used as a highway by an invading army. The Kings of Dahomey have always regarded the Wheme as defensively the weak point of their country, and for generations they kept it

CLOSELY GUARDED,

so that no stranger might use it as a highway into the interior. It was not until 1875 that Father Baudin of the French Missions eluded the Dahomeyan guards and paddled about forty miles up the river. Since the natives became better acquainted with the whites the Wheme has been ascended by several officials and explorers, including Ballot and Skertchly. These travellers found that light-draught steamers could easily ascend the tortuous stream to within twenty-five miles of Abomey, and when the French decided last winter to punish foolish young King Behanzin for his arrogant threats and disregard of treaty obligations, it was decided to use the Wheme as a highway to the neighborhood of the capital.

His three little vessels, two of them gunboats, could not carry a third of Col. Dodd's force and supplies. The cavalry horses and their riders, for the most part, ascended on the boats; heavy artillery wagons dragged by natives went in advance, crushing a road through the jungle and forest along the river bank for the greater part of the expedition. Two or three thousand porters were always on the march between strong detachments of soldiers carrying the supplies; and other large bands of carriers were tramping to and fro along the road thus made, replenishing the commissary department from the abounding markets of Porto Novo.

Col. Dodds had been only five days on his journey when the trouble began. The well-wooded district through which the infantry were marching afforded the best of shelter for the enemy, and for days hardly an hour passed that the ambushed soldiers of Behanzin were not firing into the advancing column. The enemy did not appear in strong force, however, and were easily forced back.

Behanzin had thoroughly planned his defence. He did not intend to offer serious battle until the French were far inland. If he then succeeded in defeating them he hoped to wipe them before re-enforcements could reach them or they could flee to the coast. It was not until Col. Dodds had advanced about fifty miles up the river that he

CAME WITHIN SIGHT

of the first earthworks which the enemy had built crossing the route along which the invader was advancing. If defeated in his first serious stand, Behanzin intended to fall back ten or twelve miles to another line of fortifications, and in this way he had prepared for a possible retreat of his army all the way to Abomey. The nearer the French came to that city the more numerous they found the lines of defence.

Behanzin knew just where to place these fortifications, for as the whites were using the Wheme as a highway, he knew they would ascend it until they reached Tohue, whence the only fair road to the capital leaves the river; and it was necessary for the French to use this road, because the forest is very dense between the river and Abomey, and the invaders could take no other route save at great cost of time and energy.

Col. Dodd's first hard fight was at the little hamlet of Taku, where his column was attacked by a small force. He captured the town and drove the enemy before him as he still advanced along the left bank. Five more hard fights occurred before the army reached Tohue, when Col. Dodds turned west to Abomey. In two of these battles the Dahomeyans brought at least 4,000 men and women soldiers into action. The loss of the natives was heavy, for the French had the best of rifles and artillery. The Dahomeyans fought with the greatest courage, and at the battle of Dogba, where the King's brother led the charge, thirty of the women warriors were killed almost at the muzzles of the cannon. They had a large supply of ammunition, but wasted the most of it. Their guns, contrary to many reports, were of inferior quality, and they were slow in loading them. In firing they held the buts of the weapons under their arms and blazed away, most of their shots whizzing above the heads of the French forces.

All these battles occurred in the timber, and on two occasions the natives surprised the French early in the morning by rushing unheralded upon the advancing force. This is their favorite mode of attack. When possible they always endeavor to swarm in upon and overwhelm an enemy early in the day before he had stirred from camp. It was estimated on Oct. 2, when Col. Dodds left the river and began his overland march to Abomey, that Behanzin had already lost a third of his fighting force. About 5,600 men and women had been killed or wounded. Behanzin had been compelled to keep a large force on the road between his advanced posts and the capital to replenish his food supplies. He had also found it necessary to retura to the capital himself for a fortnight to quell a revolution that broke out in his absence. His uncle and elder brother were leaders of the revolt, and they and their party fled to the north when the King with all his reserve troops suddenly appeared on the scene.

The young man exhibited the most desperate courage. Probably long before Dodds reached the neighborhood of Abomey, the King bitterly regretted his foolhardy recklessness in making enemies of the French. It was too late, however, to retrieve the blunder. All he could do was to fight with the utmost desperation for his throne, and that he did. He no sooner returned to his force at the front than he sent word to Col. Dodds that unless he at once turned

BACK TO THE SEA

he would annihilate him. He said he had held the flower of his army and the best of his equipment in reserve, and would not permit the French to advance another inch into his country. This was pure braggadocio. Col. Dodds paid no attention to the empty threat, but as soon as his force and supplies had been landed at Tohue he started west for the sacred town of Canna and the capital.

Then Behanzin's frantic efforts to stop the invaders were redoubled. Fortifications had been erected every three or four miles across the road. The entire Dahomeyan army was now at the front. Every day for five days the native army threw itself with the utmost desperation upon the enemy. The French vigorously repulsed each attack, and the natives suffered great loss. As a result of this fighting Behanzin asked for a parley. Col. Dodds said that he would talk with the King provided he would first evacuate the defences which he had erected along the Koto River. Behanzin refused to give up this line of defence, and next day the column again advanced. It had been re-enforced by fresh arrivals from the coast, and in two days more it had captured the strongest lines of fortifications it has yet met on the Koto River, and had also scaled two lines of entrenchments beyond Akpa. In these later affairs the French lost eighty-seven killed and wounded, and in the first twenty miles of their march from the Wheme the French loss was twenty-seven killed and 161 wounded.

Col. Dodds's forces were tired out with almost incessant fighting, and four miles from Canna he paused to give his troops a rest. A large number of his carriers were provided with hammocks and carried the wounded back over the hard-won road and down the river to Porto Novo. A strong force of soldiers went with them as an escort. Dodds did not intend to advance again until a thousand porters who were supposed to be on the road from Porto Novo with supplies reached him. Three days later the supplies came and then Col. Dodds easily

DROVE THE ENEMY OUT

of the sacred town where the bones of a long line of Dahomey's Kings are buried.

Behanzin now retired to the new lines of fortifications with which he had surrounded Abomey, eight miles beyond Canna. About the middle of November Col. Dodds began the siege of Abomey. He had found that in the last two or three battles, culminating with the evacuation of Canna, the resistance of the Dahomeyans had become less and less serious. They had time and again seen their comrades mown down by grapeshot at the muzzles of the French guns, and had become greatly disheartened. Behanzin had a few Krupp and canister guns which were badly served, and some of them were disabled by the French artillery. It seemed evident, however, that the enemy would make a desperate attempt to save their cause by preventing the French from entering the capital. Col. Dodds's plan was to invest this town of 12,000 people and wait until additional forces were sent to him from the coast before attempting aggressive measures. Caution is one of his most admirable characteristics, and having carried everything before him to the gates of the capital he did not intend to risk all in the final battles without a force to insure his victory.

All through the campaign Dodds has been able, every week or so to despatch couriers to Porto Novo with despatches for the French Government. From Porto Novo they were telegraphed to the coast. These despatches have very concisely summed up the progress of the expedition. The couriers travelled with great rapidity, and the despatch from Canna was cabled to Paris four days after it was sent. This however, is not quite so expeditious as the time made by Behanzin's runners, who, stationed in relays along the road between Abomey and Whydah, have carried his messages to the coast in a single day. Details of the fighting have been received from French officers with this expedition.

Col. Dodds has been promoted to the rank of Brigadier-General for the great success he has achieved. His family for some generations have lived in Senegal, and his grandfather married a Fulbe woman, so that Col. Dodds has a considerable admixture of native blood in his veins. He is 50 years old, and has made a splendid record in the wars which Franch has waged, both in Senegal and in Tonkin.

The French nation has watched the progress of the campaign with the greatest interest, and not a few canards have been manufactured in Paris to meet the demand for news. Some of these sensational lies, as the alleged murder of Behanzin, the fall of Abomey, and the execution of the white men found in Behanzin's service, have been cabled to this country. France now has a once powerful native Africa State at her feet. She can and undoubtedly will make the conquered State one of the most valuable of her African possessions.

Loved His Papa.

Little Boy—"I met Mr. Jones on the street and he said he wanted to see papa about something and he called papa a 'walking' enclopædia."

Mamma—"Indeed! And what did my little pet say to Mr. Jones?"

Little Boy—"I called him an old centipede and threw a stone at him."

Sufficient Points of Resemblance.

"Darling, don't you think little Johnnie resembles you more and more every day?"

"Do you think so, dearest?"

"Yes, love. If you notice you will find that he always wants the best in the house and that he never does anything as you want him to and that he is continually overeating, and yesterday he kissed the chambermaid."

"That will do, Maria."

The oldest building in England is the Tower of London.

FOOD, COOKS, AND EATING.

Columbus discovered turtle soup.

Moore was the only English epicure poet.

John Baptist ate locusts and wild honey.

Locusts are still eaten in Africa and Arabia.

Cream ices were first made in Paris in 1774.

Calves' head soup is first mentioned in 827.

Dumas attributed Eve's sin to the love of eating.

Napoleon's favorite dainty was blood pudding.

The Danes were accustomed to eat six times a day.

In 1500 the French made five kinds of wheat bread.

The Middle Ages were famous for their soups.

Bread was first made in England with yeast in 1634.

Animals were granted to Noah as food, B.C. 2348.

Ices were unknown before the seventeenth century.

Oliver Cromwell loved veal seasoned with oranges.

In 1313 the price of an ox was $12; if corn-fed $18.

In 1313 a lamb was worth 5s.; two dozen eggs, 3d.

Salmon was formerly believed to promote drunkenness.

The peacock and swan were famous old German dainties.

In Iceland codfish beaten to a powder are used as bread.

The fashion of serving the fish between meats began in 1562.

Ching Noung, B.C. 1998, taught the Chinese to make bread.

Pork was the most highly esteemed flesh at a Roman table.

Good cooking was introduced into England by the Normans.

Snails, called escargots, are in France considered a dainty.

In 1530 oranges were first imported into England from Italy.

For five centuries France has furnished the world with cooks.

Hippocras mentions wafers, fruits, cream and cheese as desserts.

The Egyptians cooked meat as soon as the animal was killed.

In B.C. 1898 Abraham cooked a calf to entertain his friends.

Leo X. was a most notable patron of cooking and a famous eater.

At a Roman feast all viands were served in hot chafing dishes.

Marmalade, made from quinces, was known in England in 1400.

Marie de Medici introduced Italian cooks and cookery into France.

Thomas Cosgate introduced the fork into England about 1640.

Vitellius had one dish which cost 1,000 sesterces, over $40,000.

The booksellers' lists contain the titles of over 600 cook-books.

In the seventeenth century chickens were served with verjuice.

Plutarch says no Egyptians save the Lycopolites would eat mutton.

THE LUNAR ATMOSPHERE.

Recent Observations at the American Station in Peru.

During his observations at Arequipa, Peru, Prof. W. E. Pickering has frequently seen the so-called "lunar twilight," which prolongs the cusps of the crescent moon. This phenomenon has been noted by other scientists, among whom are Schroeter, Webb and Gruitheisen, and Prof. Pickering's observations of that exhibition of the existence of a lunar atmosphere have led him to speak more at length in regard to the thin aerial cloak which encompasses the earth's satellite. The Arequipa observations were made with a high-power telescope, and the lunar twilight was traced across the stellar surface to a distance corresponding to sixty seconds of arc, or in lunar latitude to about 4 degrees, as against the 18 degrees of latitude in

A TERRESTRIAL TWILIGHT.

As the atmospheric refraction induced by the moon's atmosphere is equal to a divergence of about two seconds from the direct ray, it has been generally accepted as a matter of common belief that the density of the lunar atmosphere is about three one-hundredths, or four one-hundredths of that of the terrestrial atmosphere.

According to Prof. Pickering's observations these figures are much too large. On August 12, 1892, during the occultation of Jupiter, he repeated some experiments that he had made in California during a similar occultation, and he now reiterates his belief that the density of the lunar atmosphere is surely not above 1-4000 and may not be 1-8000 of that of the earth. The basis for this conclusion is that immediately before and after the occultation of Jupiter the refraction produced by the lunar atmosphere did not exceed one second of arc. This observation was carefully made, and will probably be confirmed by future photographs of lunar refraction. The fact that the lunar atmosphere is even much less dense than it has been believed to be may be accepted as at least partially proven. For all practical purposes this would render the lunar atmosphere at the surface of the moon of the same density as the terrestrial atmosphere at about forty-five miles from the surface of the earth. It is known that the latter density is sufficient to cause refraction, so that there seems nothing unreasonable in Prof. Pickering's conclusions.

Why the moon's air should be so rarefied is still an open question. It may be taken for granted that, if the moon were once a part of the earth, the original lunar atmosphere was at least 1-40th as dense as the present terrestrial atmosphere. That it has grown at least 100 times as rarefied is a strange circumstance, but one that admits of a plausible explanation. According to Prof. Pickering's theory given in the present number of Astronomy, with an account of his Arequipa observations, the loss of density in the lunar atmosphere has not only been going on since the moon was born into space, but is being continued to-day:

"According to the researches of Profs. Langley and Very, the temperature of the moon's surface may be taken at about 0° centigrade. There is no reason to suppose that any particle situated in the immediate vicinity of the earth's orbit, would possess a much lower temperature than if exposed to

THE SUN'S RAYS.

At this temperature the molecules of nitrogen composing our atmosphere have a mean velocity of rather less than one-third of a mile per second, and the molecules of oxygen a mean velocity of rather more than one quarter of a mile. These are their mean velocities, but some of these particles are undoubtedly moving at a very much slower rate than this, and some a great deal faster. When there are many of them they are changing their velocities millions of times every second, owing to natural collisions. But where there are only comparatively few of them, as would be the case, for instance, near the outskirts of the lunar atmosphere, it would frequently happen that one of these molecules possessing five or six times the average velocity of the rest would not meet any other molecule in its path to stop it and it would then be carried away from the moon never to return to it again unless brought back by the attraction of some other outside body such as the earth or the sun. We thus see that even now the moon must be constantly losing whatever atmosphere it possesses while it has no means whatever of recovering it."

Fortunately if the same thing be taking place in the terrestrial atmosphere it must be doing so at a very slow rate indeed. If in some earlier period hydrogen gas was more abundant in the terrestrial atmosphere than it now is, it may be that much of that gas escaped, but the oxygen and nitrogen are not likely to be lost very easily. For a long time to come, therefore, the earth seems safe enough as a breathing place for mankind, and it is probable that the density of the terrestrial atmosphere will last as long as the human race does.

AN INVISIBLE EMPEROR.

Streets Must Be Vacant Where the Chinese Monarch Walks.

The traveler who is strolling about the principal thoroughfares of Pekin is liable at a crossing of two main streets to find a huge screen of patchwork cloth suspended from poles in such a way as to obstruct the view from all sides, only a narrow opening left for carts and pedestrians. Pursuing his way he notices that the entrance to all the many alleys is barricaded with rush mats, and the same kind of screen is placed in front of ruined temples and vacant lots which have been used as the places of deposit of filth or rubbish. Whenever the Emperor is about to make his exit from the city or is about to return criers announce that fact to the people, who then disappear, not to emerge until the invisible monarch has passed, when things go on as usual until the next occasion of a like nature.

There are two main benefits supposed to be attached to this characteristically Oriental proceeding—it helps to preserve the fiction of the sacredness of the person of the Emperor and of his being something other than an ordinary mortal, and it is a valuable check upon reckless assassins of the Guiteau type, whom China would easily furnish in unlimited numbers. A third result is incidental. As the people see nothing of the Emperor, so he sees nothing of the people. He is probably the only man in China who is unable to form any idea of what the Chinese are like or what they are about. What is seen in the imperial court is no type of China or the Chinese, but it must be a literal impossibility for the Emperor to get anything else upon which to base a notion of his empire.

What does the Emperor think, how much does he know, what does he think that he knows, does he think at all, what is the specific gravity of the darkness in which he perpetually abides and how many bent rays of light reach him through the opaque oyster shells known as "Boards"? This mats and-bed quilt theory of government is not confined to the Emperor, but runs all the way through the ranks of officialdom. The district magistrate is supposed to be the man that knows his district, and the prefect the man that knows his prefecture; but these are mere figures of speech used in a purely ideal way. No one in a district knows less of what is going on within its boundaries than the chief officials; no one would have more trouble in finding out what is going on, supposing he really desired to know.

As a rule, there is no one who really cares less to know or who considers it less his business to know, provided the taxes are paid and the people are "tranquilized." It is very difficult for most Chinese officials to come to any useful conclusion as to their duties, for the reason that they generally have too little interest in the matter, and are in reality almost as much pinioned in shackles as the prisoners at the doors of their yamens wearing wooden platform. about their necks, but with this difference, that the sentence on the prisoner is for a definite term and end, while that of the official is too often limited only by his life Chinese officialdom is largely shut up in a shell, just as it was a generation ago, and if we hear the hammering within it is much more likely to be a defense against those outside to prevent their breaking in than an effort on the part of the imprisoned to get out.—[North China.

Was It a Breach?

A well-known attorney in Detroit, when he first hung out his shingle, didn't know anywhere near as much as he knows now about the mysteries of the profession. His first client was a young woman who wanted to bring a suit for breach of promise. He asked her to tell him all the circumstances, and she did. When her story was finished he shook his head doubtfully.

"I don't know about this," he said. "You say he asked you to be his wife?"

"Yes, sir."

"And you said you would?"

"Yes, sir."

"Then he left and didn't come back any more?"

"Yes, sir."

"Um-um," hesitated the attorney; "did you ask him to be your husband?"

"Of course I didn't."

"Did he promise to be?"

"No, sir."

"Did he say anything further than for you to be his wife?"

"No, sir."

"Well, my dear miss, I don't see where there was any breach of promise, do you? The fact is, you were careless, and I don't see how you can win this case. You'll have to be more particular next time. You—" but she didn't wait to hear any more of his advice; she bounced out and got another attorney.

HIS PLUCK SAVED HIM.

A "Cruiser's" Terrible Experience in a North Michigan Wilderness.

Four Days in a Snow Storm, Alone and Disabled by an Accident—How He Made His Way to a Lumber Camp and Was Saved.

A correspondent at Grand Rapids, Minn., writes as follows:—James Gilmore, who is now limping around the Hotel Gladstone in this city, is the hero of a story of indomitable pluck and courage that has seldom if ever been equaled in the annals of the woods in the far North. Like a typical hero, Gilmore wears his honors modestly, and it is almost with diffidence that his few words concerning the adventure have been told. His pale face, emaciated limbs and pain-drawn face tell a most eloquent story, however, of his privation and suffering.

Gilmore in local parlance is a "cruiser." Two weeks ago last Sunday he was up on the Big Forks River, about sixty miles from here, looking over the timber for the purpose of finding a suitable piece and then taking a homestead. He had with him the usual outfit of a cruiser or explorer—blankets, provisions and gun. Of course a good sharp ax was included. As he was making his way through some thick underbrush with that implement in his left hand some twigs caught the handle and his leg was thrown against the keen bit with such force as to sink it clear to the bone, just above the knee.

GILMORE'S STORY.

"There was not much pain," he said, in telling his story to your correspondent, "but my leg refused to support me, and then I think I must have fainted. When I revived I found myself lying helpless in the snow, which was rapidly being crimsoned with the blood from my injured limb. My first thought was to stanch the hemorrhage, which I managed to do by unbuckling my leather belt from around my body and strapping it firmly and closely just above the wound. Darkness was by this time falling, the snow eddying about me and the wind was rising. Disengaging my pack, sack and blankets, I tried to arise. The effort was a failure, the limb proving useless. Then I realized that I had before me a struggle against fearful odds for life, but I determined to fight the grim old monster to a gritty finish one way or another.

"There I was miles from any human being or habitation. Where I fell, however, the brush was quite thick. There I managed in someway, I hardly know how, to clear, one-handed, with my ax, a little open space in which to lie in easily. I also contrived to collect enough wood to make a little fire, for the cold was telling on me and I was nearly frozen. Next I managed to get at my blankets and unpack my sack. Over my fire of sticks I was enabled to cook a little food, and from melted snow I made some coffee.

"It was nearly midnight before I got enough brushwood together by dragging myself

FROM BUSH TO BUSH

by my hands to keep the fire going the rest of the night. When I cut down a bush I made short pieces of it, and with a pole poked them into a convenient place. At last I dragged myself up and rolled up in the blankets. I was very weak from loss of blood. I could not sleep much, and would not have dared to any way, as I had the fire to keep up. It was Sunday. I staid there all of Monday, the next day. I enlarged my camp a little by dragging myself around for fuel. Since November 1, and even earlier, that region has been covered with snow. That Monday night was one of the sharpest of this season. The thermometer slid down to 10° below zero and there was a strong north wind. What I endured as I lay there wounded and weak from loss of blood must be imagined. I can not describe it.

"Tuesday, the second day after the accident. I decided to try to get to a camp. My wound had become feverish. My temples were throbbing like trip-hammers, my fingers were benumbed and my feet slightly frost-bitten. I commenced to use my wits still further. In my pack-sack was a ball of twine, as all experienced woodsmen and packers always carry for emergencies. That I measured into three equal lengths of about 40 feet. The end of one was tied to my rifle that of another to my pack, and that of a third to my bundle of blankets. With the lose ends attached to my well leg I would crawl the 40 feet and then draw the articles separately to me, only to repeat time and time again the process of the tedious march. During that day I managed to make about half a mile, and at night found myself at the banks of a small frozen stream. I made a camp the same as I had the two nights previous.

"During that night I solved the problem of proceeding further. With my sharp ax I chopped runners for a rude sled, and with the cord that had stood me in such good stead I lashed the parts together. I loaded on my pack, blankets and gun, together with myself, and with my iron-pointed staff I pushed myself nine miles along that stream on the ice, getting within a quarter of a mile of a camp, which I reached Wednesday night, the fourth after the accident.

"There was no one there to give my injuries a professional dressing, but bandages were applied and the next day, on the bottom of a springless camp supply wagon, I began a sixty-mile ride over a corduroy road. That was the most painful part of the journey, and it took me three days to get here to Grand Rapids."

When Gilmore got here he was completely prostrated from the jolting he had received, while his injured limb was swollen to twice its natural size. In spite of all that exposure he is gaining strength and the wound is healing nicely. No one here, however, has any desire to experience his record in these great woods of the northland.

A Wonderful Dream.

Watts, a Bristol man, the discoverer of the present mode of making shot, owed his fortune to a dream, which led him to wonder what shape molten lead would assume in falling through the air, and, finally to set his mind at rest, he ascended to the top of the steeple of a church, and dropped slowly and regularly a ladleful of molten lead into a moat below. Decending, he took from the bottom of the shallow several handfuls of the most perfect shot he had ever seen.