

FIGHTING FOR HOMES

DESPERATE CONFLICT WAGED BY YAQUI INDIANS.

Mexicans' Occupation of Their Land the Casus Belli—Outbreak Believed to Be Their Last Stand—Transvaal of America Involved in Fierce Contest.

The fact that Mexico is at war with the Yaqui Indians is known by means of the newspapers, but it has no special significance to the average reader who knows little about the Yaquis or their history. This history is a romance of an unconquerable race. When Cortes landed in Mexico the Yaquis were a powerful race numbering 300,000 souls. They occupied the northwestern part of Mexico, bordering on the Gulf of California on the west, and on what is now the State of Arizona on the north. In the early days, how-

imposes upon them and the sovereignty which Mexico assumes are intolerable.

The present outbreak was brought about in the usual way. The Mexicans violated the treaty made with Tetablate and encroached upon Yaqui land. Immediately the Yaquis were in arms. The fighting blood which centuries of warfare and oppression have been powerless to cool, boiled under the sense of wrong. The Yaquis took the field. Several engagements have been fought. Chief Tetablate was killed, but his followers were only fired to avenge his death. Hundreds of Mexican soldiers have gone down before the Yaqui fire. Mexico realizes that the uprising is serious and it is making strenuous exertions to meet the crisis. The war on the part of the Indians has been conducted with marked ability and splendid dash and courage. The Yaquis have some idea of military combinations. To the cunning and daring of the Apaches they add the self-control and cool judgment which association

porters cannot be known, but the tactics pursued by the Yaquis at Guaymas suggest a directing intelligence familiar with elementary military science at least. It is probable that some of the Rough Riders are with the Yaquis, putting into practice some of the things they learned about war in Cuba. Doubtless by means of the same influence the Yaquis came into possession of a Maxim gun, which was shipped into the mines in sections under the guise of a new style of mining drill. This engine of destruction was set up and it is said the Yaquis' natural talent for mechanics enabled them readily to master the gun's action and mechanical principles.

At all events, when Gen. Torres with 6,000 Mexican troops moved out of Guaymas to attack the rebels, he was treated to a disagreeable surprise. He had declared that he would end Yaqui rebellions once and for all by the simple process of extermination. With the forces at his command he could, he



According to Prof. Harrison Canadian hallstones have two unknown species of micro-organisms to which he has applied the names, respectively, of *Bacterium flavus grandinis* and *Mucor malleus grandinis*. He also, like preceding investigators, has discovered in hallstones various fluorescing bacteria, which leads him to support the theory of Bujwid that hallstones are produced from surface water which is carried up by storms and then frozen.

Dr. F. A. Cook, describing the effects of the long Antarctic night on the human body and mind, says that on the exploring ship *Belgica*, as the cold night lengthened, all became pale "with a kind of greenish hue." The heart grew feeble in its action. The men were incapable of concentrated attention, or of prolonged thought. One sailor was driven to the verge of insanity, but when the returning sun began to appear above the horizon he recovered.

Sir John Murray in a recent address drew a vivid picture of the time, in the remote future, when temperatures as low as those which Prof. Dewar produces in his experiments at the Royal Institution will prevail all over the earth. The atmosphere and the oceans will then have disappeared within the rocky crust of the globe, their elements having entered into new combinations. In other words, to use Sir John Murray's expression, "the waters of the ocean will have become solid rock." But over their surface will roll the waves of a new and most wonderful sea, "an ocean of liquid air about forty feet in depth." At that time, of course, life as we know it will have vanished from the earth.

Human science owes many a debt, especially on the practical side, to the instinct of the lower animals. One of these obligations is intimated in a recent scientific review of the subject of dams. Engineers frequently build dams straight across streams, the object being, in some cases, to save expense by sparing material. But the beaver arches his dam against the current, and experience has shown that this form of dam is best to resist floods and the impact of floating ice. Acting upon the knowledge which is instinctive with the beaver, and which human calculation approves, the great Bear Valley dam in California and some other recently constructed dams have been so made that their stability largely depends upon the resistance which their arched form presents.

Messrs. R. E. and C. Crompton recently presented to the Cycle Engineers' Institute at Birmingham the results of a remarkable investigation concerning the efficiency of the human body considered as a motor. Heretofore the body has generally been treated as analogous to a heat engine, work being obtained from it through chemical action on the muscles. But the Messrs. Crompton believe they have demonstrated that the greater part of the energy-yielding processes go on within the brain, or in the nervous system directly connected with the brain. In bicycle-riders they find that the greatest waste is from the brain and nerves, and not from the muscles. The nerve waste, they aver, is proportional to the number of times that the nerve centers energize the muscles in order to make a stroke, and hence the craving for high gears, which diminish the number of strokes and thus economize the nerve waste. They advocate, instead of high gearing, an increase in the length of the cranks, for the purpose both of reducing the number of strokes and of increasing their efficiency.

THEY INSIST ON THEIR DIVVY.

Servants Who Systematically Rob Their Rich Employers.

The champion toll-takers are the coachmen. Most of them are importations, and the government permits them to enter free of duty—an insult to our own drivers! Bah! But they come here with a purpose to "do" our Anglo-maniacs. The head coachman receives from \$60 to \$75, and his assistant, the fellow who is sometimes called "tiger" and "funk," gets about \$40. The hay may be purchased of the most reputable firm in the world, but if Mr. Coachman does not get his "divvy," he reports to his employer that the horses are not doing well—the hay is not of good quality. If the oat man on the Produce Exchange does not put something in the privy purse of Mr. Coachman the horses have botts, or something equally as impossible—the oats are unsound. It is the same with feed, corn and other provender.

One of the leading firms on the Produce Exchange received from a millionaire in Fifth avenue last week an indignant letter calling attention to the very poor oats which they had sold him at an exorbitant price. They proved that they had given him the lot at the market price, and introduced a dozen witnesses to show that the oats were the finest ever sold in this market. But

the firm refused to tip the coachman! In the matter of harness—why, our fool millionaires are robbed to "beat the band." There is an alliance between the British harness dealers in New York and all the coachmen in the city. Nothing can be bought for a horse to wear unless through this dealer, who is liberal in his "divvy." I could name a millionaire who paid \$1,200 for a set of harness that I could buy anywhere for half that price. His coachman got the extra \$600.

The style in carriages changes every season, just to keep people buying and swapping. The coachman stands in with the more prominent carriage-makers of this city—deny it who dares!—and if his employer, feeling a trifle behind the fashion, wants to exchange his cabriolet a year old for a new one he must pay nearly the original price. His imported British coachman makes usually from \$200 to \$400 by an exchange.

On horseshoeing, axle grease, harness oils, silver and gold polish, uniforms, etc., the men connected with the stables of the millionaire are expected to more than double their annual salaries. And these importations, duty free, never fall short of expectations.

Down to the minutest detail of house-keeping there is profit for the serving man and the serving women, and woe to the dealer—the butcher, the baker, the candlestick-maker—who refuses to see the extended palm of Major-Domo and Abigail. The milkman pays his way before he deposits a bottle of water solution. The butter man agrees to a divide before he scents the pantry with a pound of oleomargarine. The baker has no need of yeast in his business until he has "fixed" the people below stairs. The ice-man—Great Scott! The giant monopolist? Why, he freezes to the butler and the cook as quick as liquefied air and can give short weight until eternity. Coal and wood? Every ton delivered in the millionaire's basement costs 50 per cent. more than the common people pay and every cord 100 per cent.—New York Press.

HOW DIPHTHERIA IS SPREAD.

A Borrowed Lead Pencil Is Frequently the Vehicle of Contagion.

The apparently harmless act of borrowing a lead pencil is recognized by the medical faculty as a prolific means of propagating disease. Many people still cling to the time-honored practice of moistening the writing end of the pencil in the mouth before they proceed to write.

The practice of borrowing pencils is now believed to be responsible for many cases of diphtheria and tonsillitis which could not be otherwise accounted for. Physicians have, therefore, begun to warn their patients against putting the points of lead pencils in their mouths before they write.

The practice of "swapping" and borrowing lead pencils is more common among children than adults. The spirit of camaraderie which makes pupils grow "chummy" and social in the public schools sometimes causes lead pencils to become common property among groups of school children. A child who is recovering from any throat disease might, therefore, be the innocent means of communicating the malady to its companions. A well-known throat specialist, who has practiced in the hospitals of New York and Brooklyn, said yesterday:

"Physicians are now beginning to give their attention to the cause and prevention of diseases more than ever they did before. The rules of common sense are being instilled into the parents of the young patients, and a doctor of to-day, when called to attend a child puts its parents through a very rigid cross-examination as to the habits of his little patient. It is often found that the disease has been communicated by some harmless act which most people would not notice. Children are very democratic. A pupil at a school will moisten a lead pencil in his mouth and begin to write. A companion will borrow the pencil, and the first thing he will do in nine cases out of ten will be to put the borrowed pencil in his mouth. I have traced several cases of tonsillitis and diphtheria to this cause, which at first sight appeared inexplicable. Even the seeds of consumption may be sown by this means."

Regarding the habit of moistening the lead pencil before writing, the superintendent of a large pencil factory said yesterday:

"It is a mistake to suppose that moistening the lead of a pencil makes it write better. It spoils the pencil, as it hardens the lead, yet people will persist in the uncleanly habit of thrusting borrowed pencils in their mouths."—New York Journal.

His Gestures.

Probably the Catholic Standard, which prints this dialogue, did not intend that stiff and awkward elocutionists should take it as a helpful hint:

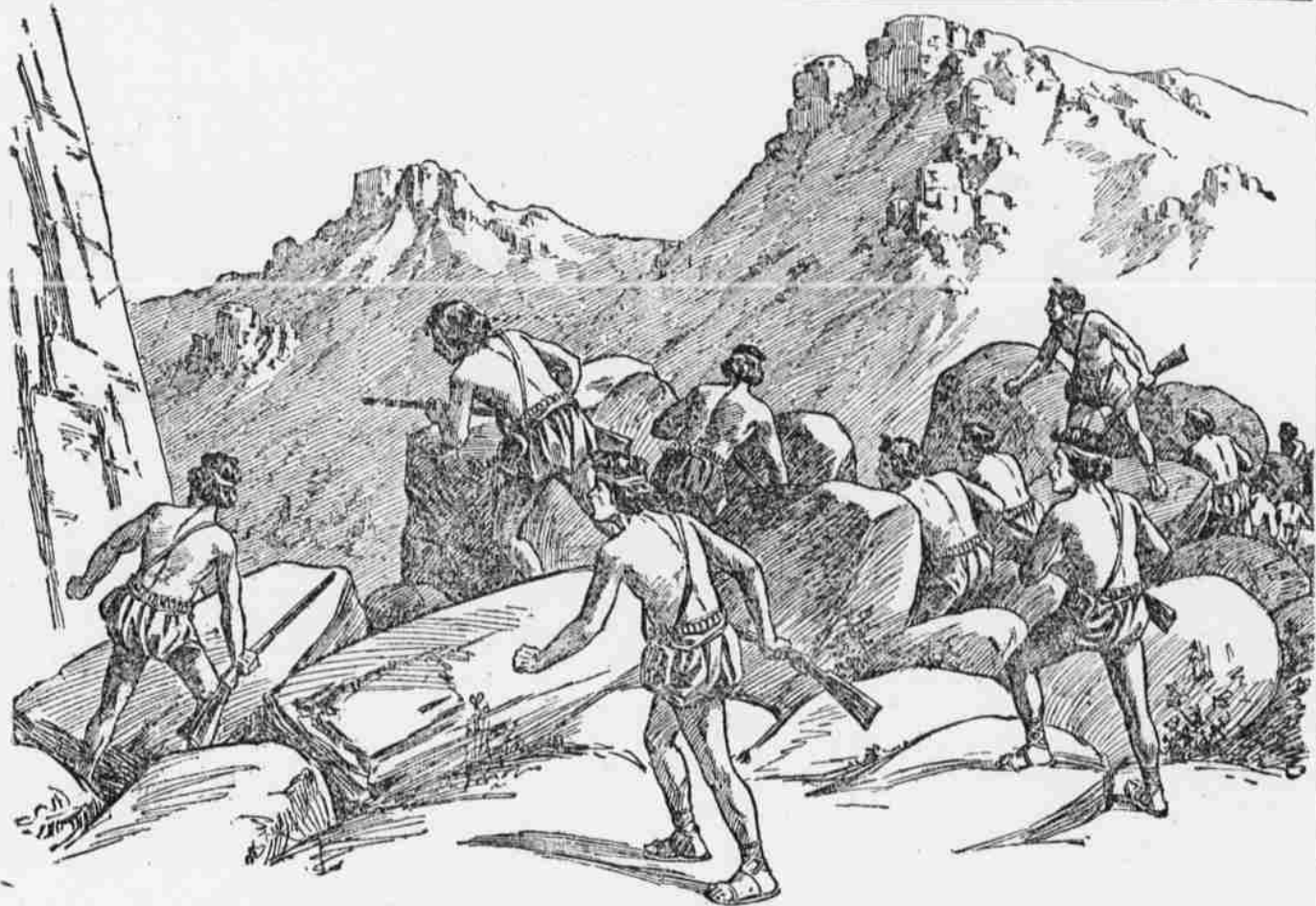
Teacher—Your recitation was extremely good, Johnny. The gestures were particularly natural. Where did you get them?

Johnny—Gilt what?

Teacher—The gestures.

Johnny—I ain't got the gestures. It's hives!

The people are surprised at each other a great deal, considering how well they know each other.



YAQUIS READY TO AMBUSH MEXICAN SOLDIERS.

ever, the tribe spread northward into what is now Colorado. For 300 years these people have been fighting the Spanish invaders and their Mexican descendants, and never have they acknowledged a master. Reduced now to a remnant of their former strength, numbering not more than 15,000, and occupying the mining region of the State of Sonora, their spirit of independence remains unbroken, their war-

with the whites and something approaching civilized modes of living have developed.

The Indians inflicted a terrible blow upon the Mexican forces near Guaymas, recently, killing 300 Mexicans and very nearly capturing the post itself. The latter disaster to Mexican arms was only averted by the assistance given the land forces by the navy. This engagement assumed the propor-

alleged, drive the Indians into a corner and then annihilate the tribe root and branch. But when Torres came upon the enemy he was himself glad to escape annihilation. He won the battle. It is true, but only by the aid of a naval landing party after the Mexican general was pretty nearly whipped out of his boots.

Contrary to all principles and practices in Indian warfare, the Yaquis were entrenched, and as the Mexicans advanced they were met by a murderous fire from the Maxim supported by modern rifles. The shock of the surprise and the mortality among the troops demoralized Torres' invincible army, which retreated precipitately upon the river, where the gunboat lay. Again the Mexicans charged, and again they were driven back by the destructive fire. The gunboat moved into position to bring its guns to bear upon the entrenched Yaquis, but the Maxim soon put the boat out of the fight, and it drifted helplessly down stream until it grounded on the hither bank.

The Final Struggle.

This temporary triumph proved the undoing of the Yaquis, as when the gunboat ran upon the bank a party was landed and making a wide detour flanked the entrenchments. Unable to bring the Maxim to bear on two points at once, the assailed in front and flank, the Yaquis were forced to retire into the mountains. They executed this movement slowly and in good order, saving their machine gun for future use. When the smoke of battle lifted 300 dead Mexicans were found upon the field. The Yaquis lost heavily also, but not so heavily as the assaulting column.

The battle of Guaymas has taught the Mexican Government what to expect. The extermination of the Yaquis for resenting Mexican aggression and breach of faith promises to be a herculean task.

Away Down is the Earth.

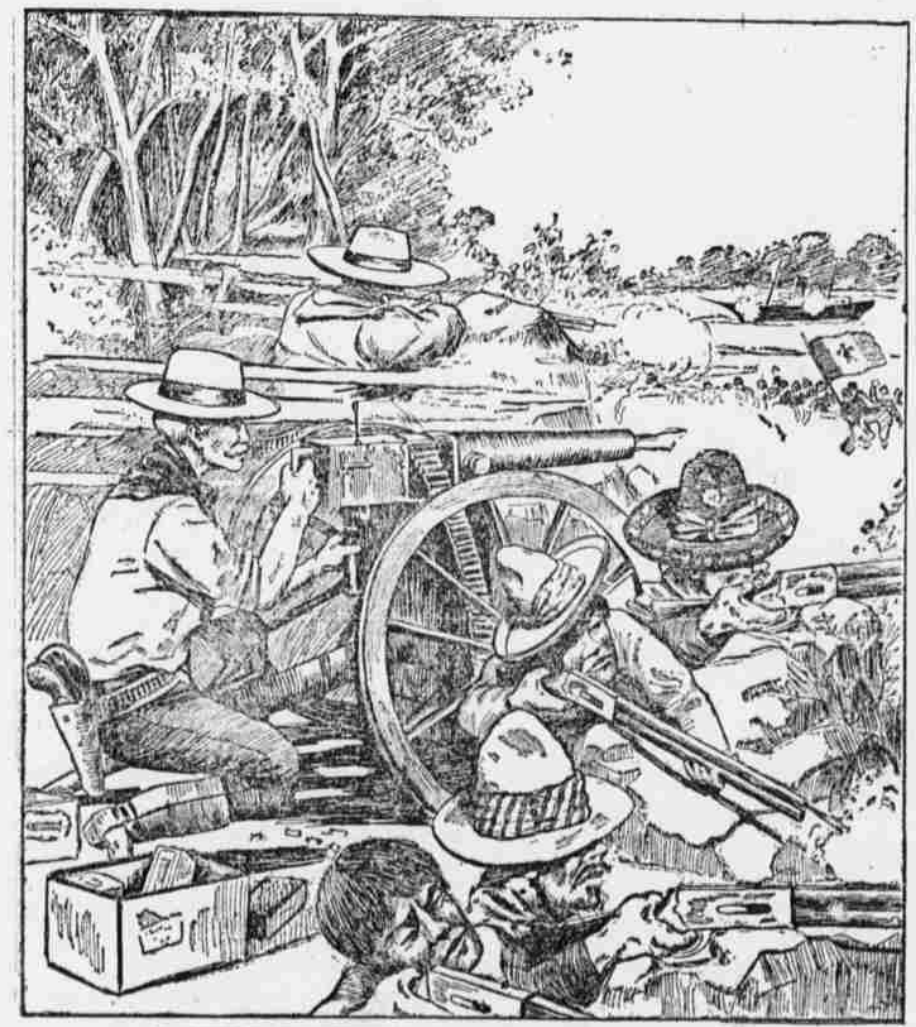
The deepest hole in the earth is at Schladebach, near Ketschau, Germany. It is 5,735 feet in depth and is for geologic research only. The drilling was begun in 1880 and stopped six years later because the engineers were unable with their instruments to go deeper.

Women Make Good Prompters.

It has been discovered that the profession of prompter is more suited to women than to men, as their voices carry better across the stage, and are less audible in the auditorium.

No one entirely outgrows the objection to going to bed at 9 o'clock, for fear he will miss something startling that will happen at 10.

There are lots of good women, who, when they get to heaven, will begin to watch to see if the Lord goes out nights.



BATTLE BETWEEN YAQUIS AND MEXICANS.

like nature is unsubdued. The world does not furnish many types of fighting men more difficult to subdue than these same Yaquis. They have much the same qualities of endurance, bravery and audacity that characterize the Apaches, but are further advanced in civilization.

The Yaquis excel the Mexicans in the mechanical arts, in carpentry, in mining, in working in metals, in weaving, in industry and in perseverance. They cultivate the soil and do most of the mining in a country which is rich in mineral wealth and which formerly belonged to the fathers of the Yaquis and which the Yaquis believe is rightfully their own at this day. They work for a mere pittance, about \$2 a month, and work hard. They make no complaint on that score, but the oppressive taxes which the Mexican Government

imposes upon them and the sovereignty which Mexico assumes are intolerable. The present outbreak was brought about in the usual way. The Mexicans violated the treaty made with Tetablate and encroached upon Yaqui land. Immediately the Yaquis were in arms. The fighting blood which centuries of warfare and oppression have been powerless to cool, boiled under the sense of wrong. The Yaquis took the field. Several engagements have been fought. Chief Tetablate was killed, but his followers were only fired to avenge his death. Hundreds of Mexican soldiers have gone down before the Yaqui fire. Mexico realizes that the uprising is serious and it is making strenuous exertions to meet the crisis. The war on the part of the Indians has been conducted with marked ability and splendid dash and courage. The Yaquis have some idea of military combinations. To the cunning and daring of the Apaches they add the self-control and cool judgment which association

Cowboy Helpers.

How much of the success of the Yaquis is due to the organizing ability and strategic skill of their white sup-