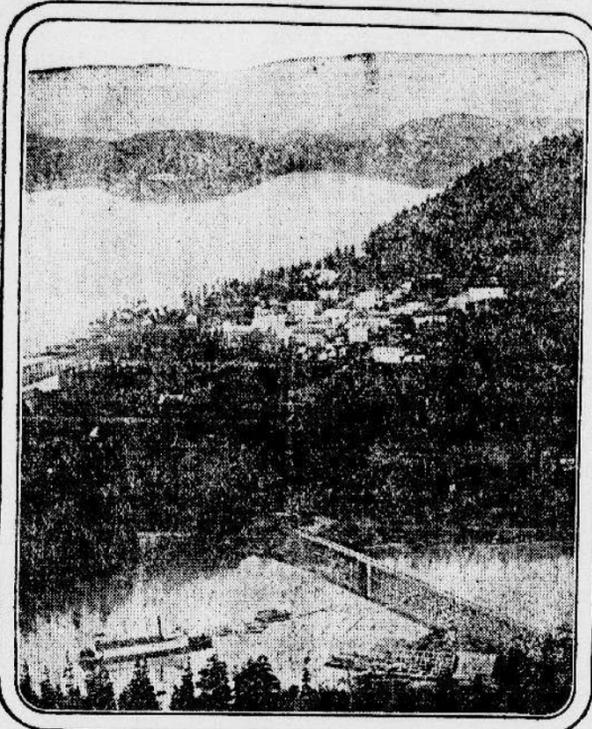


\$23,000,000 RAILROAD TO REACH MINE



THE PORT OF CORDOVA

A LOFTY peak of almost pure copper in the mountain ranges of the Copper river district in Alaska is to be transported to a smelter at Tacoma, Wash. The first shipment of 2,000 tons of broken ore was shipped recently by a railroad just completed from Cordova on the southern coast of Alaska to Kennicott, about two hundred miles inland, where the mine is located.

The mine cost its owners about one million dollars, the railroad with equipment calls for an expenditure of some twenty-three million dollars. To the prospectors who originally located the copper lode now called the Bonanza, the property was practically worthless without a railroad. They could not get the copper to market. In fact, without capital they could not mine the ore, and it was with the greatest difficulty that the hardy pioneers who discovered the deposit could meet the legal requirements of the United States government and pay for the assessment work from year to year.

The law demands that \$100 worth of work shall be done on each claim every year by any one taking up mining rights in Alaska. This demand meant not only the cost of labor, for which the liberal estimate of ten dollars a day is allowed for each man employed, but it necessitated carrying supplies of food from Valdez along a hazardous and narrow horse trail for a distance roughly calculated at two hundred miles.

The discouragements, sufferings and tragedies which followed this trail trip through the wilderness, in the winter months when the fierce blizzards of Alaska swept for days at a time down the Copper river valley, piling the snow ten to twenty feet deep in gulches, are heard of at the camp beside today, and have caused many a chechak (newcomer in Alaska) to turn back before he has crossed the summit.

It was conditions like these with which Jack Smith and Clarence Warner, who discovered the Bonanza, had to contend from 1900 until they sold their interest in the property, several years later.

When they made the location the two men were prospecting with four or five others, and it had been agreed at the start that all were to share in any discovery made by any member of the party. Out of gratitude to Colonel Abercrombie, a government army officer, who gave them great assistance, the prospectors gave him an interest. Then a further division occurred when it was necessary to raise money to do the annual assessment work. They had to buy a dozen horses every year and canned food sufficient to last a dozen men for six to eight months.

One of the party took the role of hunter and supplied the camp with fresh mountain sheep and bear meat.

The trip inside was made in winter, because by using sleds drawn by horses a ton of "grub" could be taken in over the snow by each sled. In summer it was necessary to pack the supplies on the back of a horse, and 350 pounds was the limit for each horse, owing to the steep hills to climb. The wind blew so fiercely on the summit at times that horse and sled were blown off the trail and down declivities into soft snow 50 or 100 feet below.

It was then a labor of hours to get the horse on his feet and back to the trail. The "Sourdough" prospector, or old timer, had learned by experience to spread blankets on the snow for the horse to stand on, and in this way the animal was saved. But the trail is marked by many skeletons of horses and of men.

In their efforts to sell the property, Jack Smith and Warner went to Butte to see Senator William A. Clark of Montana, whose fame as a copper magnate had spread to Alaska. When Smith told Clark that the mountain

peak was copper glance, assaying about seventy per cent pure copper, Clarke looked at his roughly clad visitors out of one eye and turned the subject to the weather and to Butte as a good mining camp. After a short talk Clark allowed the Alaskans to leave without making any further reference to the property. He did not believe their story.

Clark thought they were crazy. In Montana borinite and copper glance are not found on the surface, but at depth. The formation in Alaska is entirely different. The Bonanza outcrop is a freak in a way. It is like a great blow-out from subterranean forces, a dome built upon the cathedral range of such imposing appearance, with its weather-stained green sides glistening in the sun, that it can be seen for a great distance. The copper is found in other parts of Alaska at the contact, where a layer of limestone rests upon a supporting basis of greenstone.

Senator Clark afterward sent an expert copper mining engineer to look over the field, but the Bonanza had been sold meantime to the Havemeyers of New York and Norman Schultz and James H. Ralph of Pittsburgh, who made a fortune in oil and steel. Smith, Warner and their associates received about \$23,000 each for their interest.

The Bonanza was now becoming the wonder of the copper world. Experts for the Guggenheims made repeated examinations and those copper magnates bought the property, paying, it was said, about one million dollars. Then the transportation problem was tackled in earnest. The last spike in the railroad from Cordova to Kennicott, was driven this spring.

Contractor Heaney, who built the White Pass & Yukon railroad, carried out the plans for the Copper River railroad under the direction of Chief Engineer Hawkins. The difficulties to be overcome were stupendous. To avoid the two huge glaciers which form ice walls for miles along the Copper river, it was necessary to cross the river twice by bridges of steel costing millions of dollars to build. In places the cliffs of rock were blown out and leveled to make a roadbed for the rails, and the track runs along the edge of deep canyons through which the river waters rush in mad torrents or fall in boiling rapids to a lower level.

The scenery along the Copper river is a continual surprise. From glistening glaciers to snow-capped peaks, and from brown forests of cedar, rusty from exposure, to brilliant fields of flowers of every color, thick as buttercups in a meadow and covering vast expanses of the mountainside, the traveler's eyes turn in wonderment. The melting snows fall in great bridal veils of shimmering beauty from precipitous cliffs. The mild temperature of July and August, in the valleys and along the rivers, is sure to draw the sight-seeking traveler from every quarter of the world, with the same fascination that Switzerland holds for the sojourners abroad.

The superintendent of the Bonanza says the assay values of the ore will amaze the mining world. When it is understood that copper ore yielding two per cent, in pure metal is good enough to induce capitalists to invest millions, ore assaying 32 to 72 per cent, copper justifies the name Bonanza.

Jack Smith, the original discoverer with Clarence Warner, retired some years ago to live in a small town near Albany, N. Y., which was his home in his early youth. But the Alaska fever seized him again, and he went to Seattle to be once more with his old associates who cannot resist the allurements of the trail and camp. Warner spends most of his time in Chicago, but he, too, makes a trip every year to the Copper river belt and camps at the familiar streams along the government trail where he met and conquered hardship.

FIRST SHAFT TO WASHINGTON

Maryland Town Erected First Monument to the Father of His Country.

Boonsboro, Md.—The first monument to the memory of George Washington was erected by the citizens of Boonsboro, Md., and dedicated by them on July 4th, 1827. They assembled in the public square and marched in a body to a place on South Mountain, several miles distant, called "Blue Rocks." The orator for the occasion was the Rev. Mr. Clingham, a survivor of the Revolutionary war. The Declaration of Independence was read from one of the steps, and sev-



Memorial to Washington.

eral salutes of infantry were fired. This monument is 54 feet in circumference at its base and about 40 feet in height. The wall is composed of huge stones, many of which weigh over a ton. In the original monument, 12 feet from the base, on the west side, was inserted a white marble slab, with the following inscription:

"Erected in memory of Washington, July 4, 1827, by the citizens of Boonsboro."

At the dedicatory services several revolutionary soldiers ascended to the top of the monument and fired three rounds. The spot on which the monument is located is 1,200 feet above the surrounding country. The picture here shown was taken some years ago. The monument is now in ruins. It was struck by lightning once and at another time was dynamited.

IN MEMORY OF SAM JONES

A Church Built in Honor of the Evangelist is Dedicated.

Cartersville, Ga.—The Sam Jones Memorial church has been dedicated. All the churches of the city were invited to attend the dedication exercises, and there was preaching nowhere else in the city. The church, which is a large one, was crowded. All the pastors of the city attended the services. Bishop Kilgo of North Carolina formally dedicated the edifice. The music was furnished by the local choir. "In the Good Old Fashioned Way," the favorite song of the late Rev. Sam Jones, was one of the numbers.

The Sam Jones Memorial church was erected in the pastorate of the



Sam Jones Memorial Church.

Rev. George W. Duval, and to whose devotion and untiring efforts is most attributable the success of the enterprise. It cost more than \$40,000 and is one of the best appointed edifices in North Georgia, being given its name in memory of the life and works of the great evangelist Sam P. Jones, who was a member of this church and one of its greatest benefactors.

BOGUS COIN MADE IN SCHOOL

Scholars' Parents Used Structure as Counterfeiting Plant at Night—Outfit Found.

Buda-Pesth.—A remarkable story of the manufacture of spurious money comes from the little village of Oroslazma. The educational authorities had been advised that the village school house needed repairing, and one day a commission arrived unexpectedly to examine the building.

During the course of the inspection in one of the classrooms a strange-looking apparatus was found, which proved to be a press for the manufacture of bank notes. Further searches revealed a small closet which had been turned into a regular mint, and there were bagsful of ready-made silver and copper coins.

Predicts Iron Famine.
Philadelphia.—Speaking on the subject of the conservation of iron, Dr. Allerton S. Cushman, director of the bureau of industrial research at Washington, declared at the Franklin institute that at the present rate of production the iron supply of the United States will be exhausted in thirty years.

IRON WILL MAY FAIL

GREAT LEADER GETS HIS WAY BY OTHER METHODS.

Followers Must Be Shown That They All Gain Most by Yielding Implicit Obedience to the Conductor's Orders.

They tell us an iron will is a very fine thing. A great general rules his forces by his will. A parliamentary leader drives recalcitrant members into the right lobby by his will, if he has it. Napoleon, they say, controlled all France by his will. I have long had doubts.

Napoleon never had to get an obstinate donkey out of the way of an express train, for there were no express trains, but had the task confronted him I doubt whether the iron will that conquered France would have moved the donkey. Nay, I do not doubt; I am certain it would not. And since men are a great deal more stupid and more obstinate than donkeys I am sure it was not by an iron will alone that Napoleon ruled the French.

The iron will only served to rule himself to keep him hard and incessantly at the working out of his great idea, the idea of convincing men that he was the ablest among them, that by following him they did best for themselves. A political boss does the same; there is no iron will involved; merely he shows his followers that they all gain by going with him.

And the same rule holds true in the case of band conductors. A military conductor can get his way because the men under him are punished unless they obey him; an opera or concert conductor may get his way because he can throw out of employment the men who do not obey him.

But the true born conductor, either military or civil, gets his way and fine results when his bandmen know that by paying close attention to him and putting their backs into their work they help to secure performances of which they may all justly feel proud.

When Nikisch first came here many years ago we were told how on the continent he was wont to magnetize his men and make them insensibly yield to his will. It is likely enough they did yield; they would have been dismissed if they had not; but the magnetism did not in the least work in England. The men simply paid no attention to it; there might as well have been no magnetism at all; 'twas in vain Nikisch essayed to fix them with the glittering eye of which we had read so much; too much; the inhuman rascals refused to be fixed; the performances were poor and some one must have lost a fair sum of money over the concert.

See what happened when Nikisch returned not as master but as servant of the orchestra. The Symphony orchestra engaged him; the glittering eye nonsense and the iron will nonsense were dropped, and at once artistic results were got. One might disapprove of many things he did, and especially of his affected readings, but he gained them in a legitimate manner, through the faith the men had in him. —John F. Runciman, in the London Saturday Review.

Who Owns Shetland Islands?

It is not perhaps generally known that an opinion expressed half humorously, by Lord Salvesen at the opening of the Norse Gallery in the Scottish exhibition in Glasgow with regard to the ownership of the Orkney and Shetland islands is fortified by very high authority. His lordship, "speaking as a lawyer" is not sure whether the islands do not belong to Norway still, and thinks that legally the crown of Norway, if prepared to pay the money for which they were pledged, with interest "for three hundred years" would be entitled to redeem them. As a matter of fact, plenipotentiaries assembled at Breda in 1665 (a couple of centuries after the islands had come into the possession of the Scottish crown) decided not only that the right of redemption had not then been barred by the lapse of time, but that it was imprescribable. The islands were pledged in 1468, so that interest is due for nearly four and a half centuries.

Dog That Guarded a Cat.

When my dog was a puppy I got a little kitten to keep him company. They got to be good friends, but as they got older the cat seemed to think she could take care of herself.

When the cat climbed a tree it seemed to puzzle the dog, and he would stand below the tree and look up at the cat and then at me, as if trying to understand how the cat could get up into the tree while he had to stay on the ground.

When evening came the dog would hunt up the cat and carry her to the kennel where they slept at night. The dog kept one of his forelegs over the cat, and there she had to stay until morning. At last the cat was killed, but I have the dog yet.—Fur News.

Letter for 250 Years Undelivered.

A letter written in December, 1650, to a prominent member of the Body of Friends in Durham, England, has just been found in the Public Record office, having been undelivered. A copy of the letter has been forwarded to the descendants in the eighth generation of those for whom it was intended. The letter is addressed: "For my Loving friend Richard Hickson, a butcher in Durham, to be delivered to William Bywaters, Durham, paid 2d."



Low Slums Near the Nation's Capitol



WASHINGTON.—Washington is not one grand succession of marble structures and beautiful parks. There are slums under the shadow of the capitol that compare in squalor with the East side in New York. The capital slums have the advantage over those in New York in being less extensive and in being composed of small houses instead of lofty tenements.

The Washington refuge of the very poor is sufficiently bad to have attracted the attention of sociologists and philanthropists and to have caused President Taft to demand their improvement in a message to congress.

This district is within ten minutes' walk of the United States capitol and has for one of its boundaries the botanical gardens with their wealth of exotics. President Taft, in his message, made particular mention of Willow Tree alley, but it is no better and no worse than the others. Possibly the president mentioned only Willow

Tree alley because it was the only one bearing a name that comports well with a state document. The other four are Pigtail alley, Tincup alley, Louse alley and Hell's Half Acre alley. These names, with the exception of Willow Tree alley, have the virtue of making any other description unnecessary. Why Willow Tree alley was so named nobody remembers. There may have been a willow tree there once.

The district is hard to find. It is within the outer crust of a block which has a rather fair exterior. A stranger, after fruitless search, appealed to a policeman. The officer pointed to a narrow opening between two buildings. "Go on in there, and you'll see all you want of it," he said. "It's a pest hole, it is. I'd go with you, but it's off my beat."

The officer was lucky. What the visitor found after he passed the portal of the slums would not be pleasant adjuncts to any beat. The buildings appeared to be ages old. Stables adjoined homes. Piles of stable refuse gave forth offensive odors and drew clouds of flies. Negroes and whites were mixed in one inextricable confusion. Puny, sickly children rolled about on the ground. Slatternly, discouraged women sat on the steps or in rooms which spoke eloquently of the most abject poverty.

Uncle Sam Gives Facts About Fleas

THERE may be those who imagine it is an easy thing to kill a flea. But if they will read certain facts reported by the United States public health and marine service their minds will be disabused of the notion. The information is given in a pamphlet entitled "Notes on Agents for Flea Destruction." Fleas, it appears from these notes, survive all the usual means of insect assassination and others less common.

But how to kill the flea is not the only problem before the investigators. It is quite as much of a puzzle to know when he is dead.

It was found that when it comes to death by drowning a flea has more lives than a cat. That is to say when the medium is water. But fleas left swimming over night in a mixture of glycerin and water are dead the following morning.

Obviously the flea is a hobo among insects, for one of his deadliest enemies is green soap. A flea dipped entirely in a tincture of green soap succumbed beyond resuscitation in two minutes; another ceased his movements in forty seconds and was dead in ten minutes; no flea of any of the species examined survived the soap.

In a humane attempt to suit the tastes of the flea in the manner of



dying the investigators tried oil of pennyroyal, oil of peppermint, kerosene, miscible oil, the refuse from the Pintsch gas tanks and many other chemicals. A flea left to swim in formalin, a powerful germicide and insecticide, was "apparently dead in 12 hours," but "revived;" another kept for 20 minutes in a mixture of cresote, soap and water was still alive after fifteen minutes, but died five minutes after that.

It took 100 per cent. carbolic acid more than one minute to kill a flea; of two fleas that were made to swim in a one-thousandth mercury chloride solution, a powerful germicide, one was alive after ten hours, the other after eighteen hours; powdered sulphur was practically inert and useless for killing fleas. Hydrocyanic acid is among the most powerful poisons, yet five fleas exposed for 45 minutes to hydrocyanic gas were alive at the end of the test.

Crank's Offer Forest Fire Remedies



WHILE the field officers of the U. S. Forestry service are taking precautions against fire in the great national forests of the west, the forestry bureau is besieged constantly by "cranks" and real inventors, chiefly the former, who propose all sorts of ridiculous plans for coping with the flames. One of the most novel of these recently came from an eastern man who proposed that an artillery organization be formed in the forest service and equipped with huge mortar batteries, which would shoot grenades filled with chemicals.

This man's plan was to have a battery of these mortars hauled to a suitable hill near a forest fire, from which the grenades would be discharged rapidly into the fire and, bursting, would smother the flames. Admitting that chemicals will extinguish a small blaze, the forestry people told this inventor to move on, as all the chemicals in the world would hardly extinguish

a forest fire with a front of ten miles. Another "crank's" plan was to construct huge screens of asbestos, which could be placed around trees near a fire and thus prevent them igniting. Of course this way did not attempt to explain how the problem of transporting these screens through rough mountainous country could be solved.

A third plan was to locate a number of huge sprinkling carts in each forest and drive them to a fire, turn on the water and, presto! your fire would be out—the inventor said. He was told to go to, unless he could provide a sprinkling cart big enough to tackle a fire such as raged last fall in Idaho, the flames of which mounted over 200 feet in the air and burned the ties off a railroad bridge, and at another point jumped clear across a valley half a mile wide, converting streams in its path into steam and cooking the fish therein.

The forest fire fighters do not reject all novel suggestions. In fact, they have adopted a chemical equipment for use in putting out small ground fires in the Arkansas National forest. Some of the rangers are equipped with rubber muzzles containing sponges to be wet and put over the nose.

Inoculate Soldiers Against Typhoid

THE entire army of the United States is to be inoculated against typhoid fever, officers and privates alike. An order has been issued by Maj. Gen. Leonard Wood, chief of staff, making it compulsory for every officer and enlisted man in the army under forty-five years of age to subject himself to the typhoid fever vaccine. This order applies to all those who have not heretofore had typhoid fever or who have not been inoculated with the germ. Heretofore it has been voluntary on the part of an officer or private in the army whether he should subject himself to the experiment, but from this time every one serving in Uncle Sam's fighting force must undergo the experience.

Estimates compiled at the war department show that up to the present time about 17,000 inoculations for typhoid have been made. Of the troops who were sent to the Mexican border nearly 12,000 had been inoculated. The



total strength of the army at present is 76,000 so there will be plenty of work for the surgeons of the army to perform before each one has undergone treatment.

The "typhoid prophylactic," as it is called, has been prepared by Major Russell of the medical corps, stationed at the army medical school in this city, and will be distributed to various forts and posts throughout the country. It is estimated that in about a month's time every officer and man in the army will have been inoculated. Very little if any inconvenience as a result of the inoculation is felt by the patient.