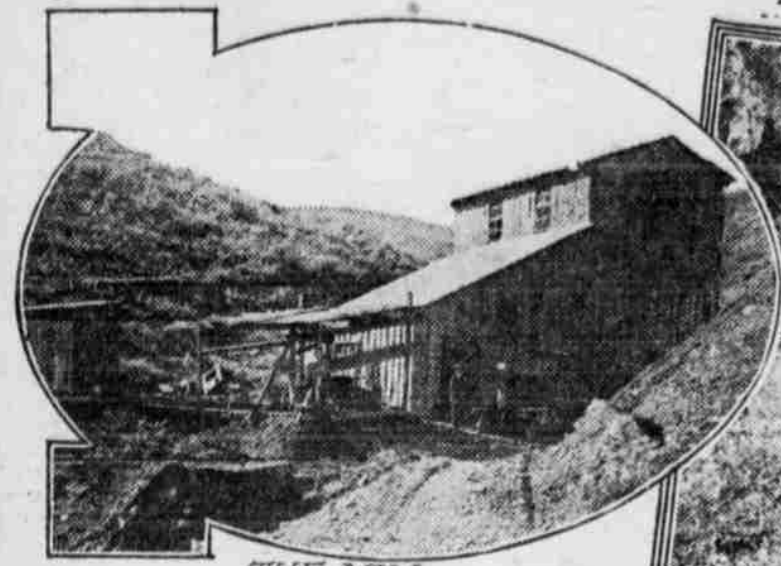


WESTERN GIRLS SUCCESSFULLY WORK MINING CLAIM

By ROBERT H. MOULTON



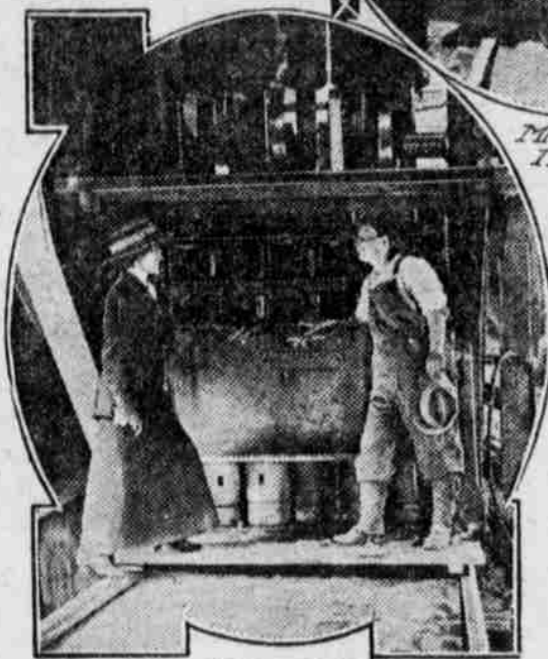
THE MILL



THE CABIN



RAILROAD LEADING FROM MINE TO MILL



MISS CARMALT AND MISS NORWOOD

THIS is the story of two western girls, Grace Carmalt and Susie Norwood of Baker, Ore., who, coming unexpectedly into the possession of a mining claim in eastern Oregon, set about to work it themselves, from the digging to the crushing of the ore and the final reclamation of the precious metal, and have succeeded so well that today a golden harvest is practically within their reach. In addition, they have gained the distinction of being probably the only women gold miners in the world.

It all came about in a peculiar way. The young women's fathers were owners of a mining claim in the Owl mountains, about eighteen miles from Baker. There the two girls went each summer, spending many hours watching the men at work far back in the horizontal shaft which they had dug in the mountain side. In this way they became familiar with the different kinds of quartz, the lay of ore veins, and the methods of blasting and timbering the walls of tunnels.

When, later, they fell heirs to the claim through the deaths of their fathers, their first thought was to sell it. But the offers made them for the property being inconsistent with their ideas of its true value, they decided to lease the claim to someone who would work it for them on shares. But here again their ideas were at variance with those of others as to what would be a fair division of the spoils. Incidentally, they proved that they were not tenderfeet when it came to bargaining with the shrewd and practical mining men of the district. Then a happy thought came to one of the girls. They had both grown weary of teaching, they were strong and healthy, they were of an adventurous spirit, and they had learned a lot about the mining game. Why not work the claim themselves?

It didn't take the other one more than a second to agree that that was just the thing; it would be a real, sure-enough lark, and as for making a success of it—well, they would show the world what two determined girls could do, even if it was supposed to be a man's work and no other woman had ever attempted it before.

The first thing was to arrange for a cabin up at the mine. The tents which they had shared with their fathers served well enough in summer, but for winter, when the snow was 20 feet deep and the thermometer hitting the low spots, protection of a more substantial character was necessary. Of course, all genuine miners work the year round, at least when there's anything to do, and having decided to go into the thing they proposed to see it through to a finish.

The result was that they had built a four-room structure, which, while it did not make any pretensions to architectural elegance, was guaranteed to defy the elements under the most distressing conditions of weather. With true foresight, gained by knowledge of their life in the mountains, they located the cabin under the lee of a hill, where it would be least exposed to the icy northwest winds and would at the same time afford an unobstructed view of a magnificent panorama of ridges and valleys stretching away to a line of snow-capped peaks more than a hundred miles distant.

It should be understood that when Miss Carmalt and Miss Norwood came into possession of the mine it was more a likely "prospect" than an assured money-maker. Evidences of gold ore were plentiful, but the problem was to strike the rich veins which would yield ore in paying quantities and warrant the erection of a mill to treat it.

Consequently the first period of their stay in the mountains was devoted to a search for these veins, which they never doubted existed somewhere back in the mountains. Day after day, through the summer and early fall, dressed in overalls and with lighted candles in their miners' caps, they burrowed farther and farther back into the mountains, frequently branching off from the main shaft to follow a new lead.

Much of this work, in the loose stone and earth, was done with pick and shovel, but now and then they found their way barred by a wall of solid granite which could only be removed by blasting with dynamite. With the details of this work the two girls were already acquainted, however, so the drilling of holes and the placing and setting off of the explosive caused them no concern. Then as the work proceeded the passages had to be timbered and cleared of the broken stone and dirt. For the latter purpose a small

ore car running on wooden rails, with a metal sheath on top, was employed, the tracks being extended back as fast as the opening was made.

During the summer months, while this preliminary work was in progress, Miss Carmalt and Miss Norwood were practically alone in their mountain home, except for an occasional weekend visit from some of their solicitous friends in Baker. But in spite of the fact that almost the first question asked by every visitor was, "Don't you find it awfully lonesome up here?" they declare that never for a moment, after the first half hour following the departure of the wagon which had brought up their last load of supplies, when they had a chance to look around, did they feel the slightest inclination to retrace their steps.

There were many things, aside from their work, to keep time from hanging heavily on their hands. In the first place, there was always the great map spread out at their feet to study by new lights and shadows. Then bird and animal life were plentiful, filling the air with songs and chatter; coming to the doorsteps for food, and often invading the cabin itself. Frequently deer fed around the cabin in the evenings, seeming to realize that they had nothing to fear from the two human companions. A couple of porcupines also became very friendly and caused no end of amusement by using various means to find a way into the cabin at night.

Down by a spring, where they got their water, a small bear made his home, and several times they found the tracks of larger ones on the trail. They also heard the cries of a panther one night. But they were never molested by any of these animals, although they were well armed to defend themselves if the occasion demanded.

During the summer they cultivated a small garden and raised chickens. These things, added to their plentiful supply of canned goods, to say nothing of the mountain trout which they caught almost at their doorsteps, afforded them a varied menu. Then they were always certain of a supply of delicacies when any of their friends journeyed up from Baker.

So the summer months passed, their life a busy and a joyous one, with the lure of hidden riches to urge them on in their work. Then one day, in the fall, the expected vein was uncovered—and the two girls celebrated the discovery by turning their last cake of chocolate into fudge!

The finding of the vein necessitated a trip to Baker, to make arrangements for the construction of a mill and the installation of a stamp battery for crushing the ore. So they locked up the cabin and started on the 18-mile trip afoot.

The mill was erected that fall, and while the two girls did not actually put it up themselves, they took an active part in its construction and superintended the work until it was completed. They also helped build a little railroad for the ore cars from the mine to the mill.

The following spring the stamp battery was put in place and then the real work of digging and crushing the ore began. But as this work was quite beyond the efforts of even two such industrious and ambitious young women, they engaged a foreman and a number of men to assist in these operations. There is never any question, however, as to who are the real bosses of

the job. All of the men seem to recognize intuitively in these two energetic girls the moving power and the guiding hands behind the whole project. Quickly and unerringly their eyes single out any fault in the work. Then in low-pitched, modulated voices, which nevertheless have in them a ring of command, they give their orders, and the men, with the air of those who bow to superior knowledge of the subject, are quick to obey.

The development of the mine is now proceeding rapidly, and while it is too early to predict what material fortune the young women eventually will enjoy, they seem to be confident that their efforts will be sufficiently rewarded. At any rate, they count their experience a valuable one, and they have built up a fund of rugged health and contentment of spirit upon which they can draw freely throughout the rest of their lives.

SCIENCE TO CONTROL THE EGG

Well-Known Theatrical Missie Can Be Regulated From Debut to Old Age.

EGGs, those mysterious "coop jewels" within the shells of which lie secrets that stagger the brain and threaten the proboscis, are practically exposed in a paper sent out by the New York State College of Agriculture at Cornell, says the New York Herald. The article shows how to color the yolk, regulate the odor, restrict the caliber of the albumen, offset evil spirits and protect the American breakfast table.

To begin with, a hen should be fed just so in order to have eggs that are dependable and upright. A hen which deliberately eats an onion usually knows in her heart that some day in the future there is to be ruined an omelet which might have been equal to any omelet ever served. Still, that hen will eat that onion with no more thought of the ultimate consumer than a farmer usually has. Hens are a mighty treacherous flock of cacklers from Cornell.

On the other hand, a hen that has been shown its place in the coop circle can be made to lay eggs that are of a certain color, size, odor and condition of servitude. Green foods and yellow corn produce deep color in the yolk; white corn, wheat and buckwheat produce a pallid yolk. Even the season of the year, which has remained above suspicion in storage circles until now, may have a definite effect upon the future conduct of a weak-chinned egg. A winter egg is stanch and sound in comparison with almost any one laid in the good old summer time. They act better in cold storage, producing practically no disorder during their incarceration.

The matter of cold storage, incidentally, is more than touched upon. After an egg has arrived on earth its treatment by those who can prove their right to it will to a great extent determine what sort of an egg it will be and remain. Evaporation of water through the pores of an eggshell should be prevented always, and a proper temperature and degree of moisture should be provided. Rough handling is specifically warned against, for, after all, even an egg has some small rights.

The best way to preserve the integrity of an egg, according to the voluminous bulletin, is by lime water and salt solution and by water-glass solution. Either method is much better than cold storage, which has become somewhat notorious in recent years and is, as they say at the egg candling resorts, in bad odor.

An unusual feature of the bulletin is its color plates, of which there are seven, showing the candling appearance and opened appearance of the eggs of different quality and at various stages. These illustrations were made from actual specimens and some of them were probably taken, for obvious reasons, from quite a distance.

GETTING HIS.

"Had a most enjoyable time at the dentist's this afternoon."
"Eh! Enjoyable?"
"Yes. When I went in another dentist was filling my dentist's teeth."

THE MATERIAL.

"So you are going to build a castle in Spain. I know what the material will consist of."
"What will it be?"
"Gold bricks."

OUT-OF-ORDINARY PEOPLE

MEDICINAL PLANT SPECIALIST



Interest in the sources of our drug supply, stimulated by the European war, has brought into some prominence one of Uncle Sam's most useful woman employees, Miss Alice Henkel, a botanist of the bureau of plant industry, who has made a specialty of investigations of medicinal plants. Miss Henkel's work has had a widespread influence through the bulletins she has written. These, nine in number, have been among the most popular bulletins issued by the department of agriculture. In fact, they are in such demand that many reprints have been made of each, and they are classed among the "best sellers" of the office of the superintendent of documents.

One of the most popular bulletins deals with weeds that are used in medicine. Miss Henkel's pamphlets have been used as reference books by many of the leading pharmaceutical colleges and dealers in crude drugs, and have been widely quoted not only in the pharmaceutical press of this country, but also abroad.

One example of the far-reaching influence of her work, which holds special gratification for Miss Henkel, came to her recently in a letter from a small mining town of Pennsylvania. She was told by the writer, a young man who had become a cripple in a mine explosion, that after reading her bulletins he decided to follow the business of collecting medicinal plants to sell to drug firms, and find out if he could become self-supporting. He said that he had been successful and was able to make a small amount of money—enough, at least, to keep his mind off of his condition and lift him out of the helpless class.

OLLIE JAMES' START

When Ollie James, the giant senator, had finished the high school at Marion at the age of sixteen, he sought a position as page in the Kentucky senate chamber. His immediate state senator promised him a place through the good offices of the lieutenant governor.

When the legislature assembled young James presented himself. The lieutenant governor declared he had forgotten the matter entirely and had appointed all the pages.

"But," said he, "I find, in looking them over, that they are a lot of spindle-legged weaklings, scarcely able to carry themselves. There ought to be one page strong enough to lift heavy records and newspaper files."

"Come and look my candidate over," said James' representative. When the lieutenant governor had a look at the giant youngster outside he gasped.

"Show the governor how strong you are, Ollie," said his senator. Whereupon Ollie James picked up the lieutenant governor in one arm and his senator in another and trotted upstairs with them.

"Heavens!" said the presiding officer, "make a place for the boy? Make two places for him!"

As soon as Ollie James was installed he organized the pages of the senate and house and established them at once as a power in the legislature. This was the beginning of a career which has already progressed to a leading place in the United States senate.



ADMIRAL OF THE AIR



The rapid expansion of the British naval air service in the war has made necessary its reorganization and it now is under the direction of a flag officer. For the important post of "director of air service" Rear Admiral Charles Lionel Vaughan-Lee was selected, and the British public has had to learn about another notability of whom it knew little or nothing before the great conflict began.

In navy circles, however, Rear Admiral Vaughan-Lee has been well known as an officer of scientific attainments. Born in 1867, he served as a midshipman in the Egyptian war of 1882. Like Carden and many other sailors of his generation, he first learned the necessity of putting cotton wool into his ears at the bombardment of Alexandria. After becoming a lieutenant he devoted himself to torpedoes, and went to work with his head as soon as he got the chance. He has great ability and thoroughness, but despite his elaborate learning in the strict science of his profession, he has always kept himself pliant and tolerant towards the new idea

EMDEN RAIDER'S ROMANCE

Captain-Lieutenant von Muecke, one of the heroes of the Emden, has written a pretty love story into the concluding chapter of his adventurous experiences, having finally returned to Germany and at Bremen led to the altar his old sweetheart, Fraulein Carla Finke.

It was the end of the journey which began on November 10, 1914, when Captain von Muecke reluctantly started homeward, escaping with other members of the crew of the Emden when their boat was sunk in the Indian ocean by an Australian battleship after the Emden had destroyed more than 70,000 tons of British shipping.

Muecke and his men, who had been sent ashore at Cocos island to destroy the wireless station there, were marooned, when the Emden fought her last fight. Seizing a schooner, they sailed via Java for 2,000 miles before they reached Arabia. Thence they made their way overland to Constantinople. At the Turkish capital Captain von Muecke's services were needed at once by the commander of the German squadron, Admiral von Usedom, and the wedding at Bremen had to be postponed until recently.

