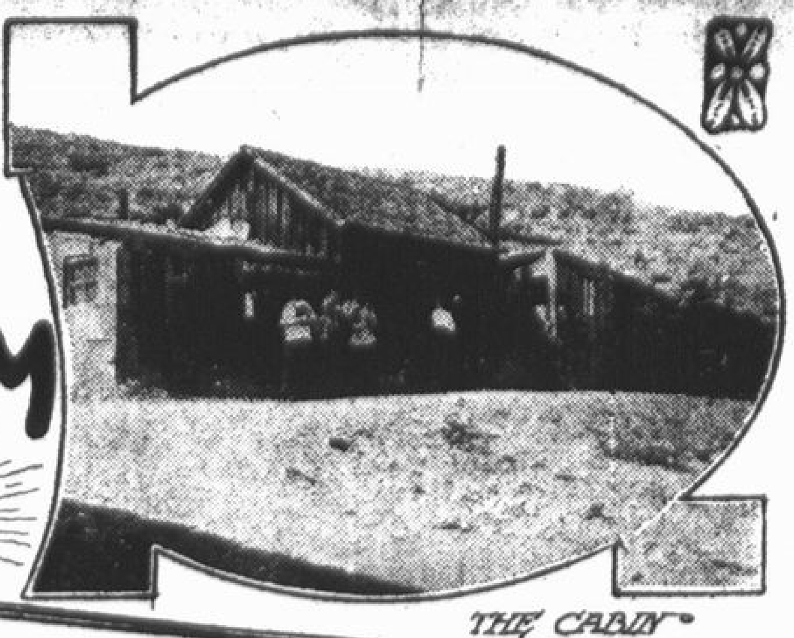
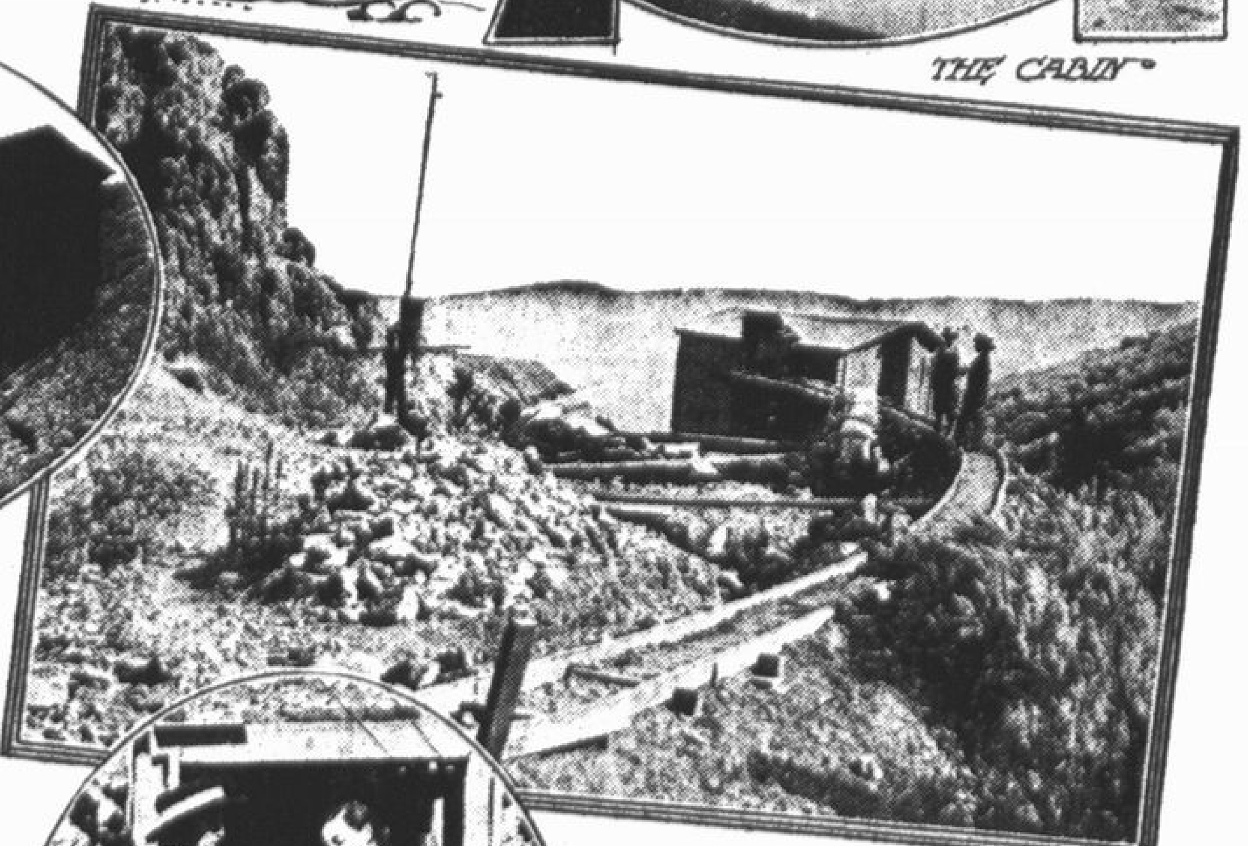
WESTERN GIRLS SUCCESSFULLY WORK MINING CLAIM

By ROBERT H. MOULTON



THE CABIN

THE MILL



RAILROAD LEADING FROM MINE TO MILL

MISS CARMALT AND MISS NORWOOD

THE STAMP BATTERY

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 week-end 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 Missile 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 crackers at best, it seems, according to the late bulletins 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."

INTERNATIONAL SUNDAY SCHOOL LESSON

(By E. O. SELLERS, Acting Director of the Sunday School Course, the Moody Bible Institute, Chicago.)

LESSON FOR OCTOBER 24

ELISHA'S HEAVENLY DEFENDERS.

LESSON TEXT—II Kings 6:8-23.

GOLDEN TEXT—The angel of Jehovah encampeth round about them that fear him, and delivereth them.—Ps. 34:7.

A map is useful in teaching this lesson. The events occurred during the revolution which resulted in the extermination of Jezebel and her brood. Dothan, a small walled town, was about ten miles north and slightly east of Samaria, the capital of Israel, and in history is connected with Joseph (Gen. 37). Damascus was the capital of Syria.

I. Danger, vv. 8-13. Jehoram, king of Israel, cleaved to the sins of Jeroboam and of Ahab, his father. In Judah, Jehoram, the son of Jehoshaphat, married Athaliah, the daughter of Ahab and Jezebel. General Jehu, famous for his driving, was soon to become king of Israel. The king of Assyria, being otherwise engaged, allowed Syria, the constant enemy of Israel, to make a fresh attack unhindered (v. 8). Elisha, the patriot, the "man of God," proves to be Israel's real safety. Elisha has not left us great revelations like Isaiah and other prophets, but he knew from day to day God's will, and he has power with him so that he could warn his people of impending danger. He had what the king and the people both lacked, a vision of God. He saw the needs and dangers, but also the resources at his command. Thus he delivered Israel many times (v. 10). We, too, are thus frequently delivered, let us praise God. The underlying reason for Israel's danger was its neglect of the word of God, and the same can be said as explaining the defeat of the Syrians. True patriotism combines vision and warning. The king of Syria, like countless other despots, knew not friend from foe, but evidently he had one retainer who told him the truth (v. 12). Some have suggested that this was Naaman; perhaps it was a captive Israelite. In either case it suggests God's knowledge of us (See Ps. 139:1-10.)

II. Defense, vv. 14-18. It was not a mere guerrilla detachment sent to Dothan to capture Elisha before making the main attack upon Samaria, but a well-officered army. Elisha meant more to them than did the king of Israel. The servant of Elisha had risen early and saw only the hills surrounding Dothan, upon which was "a host with horses and chariots round about the city" (v. 15), and in consternation he exclaims: "Alas, my master, how shall we do?" Again we are impressed with the vision of Elisha and the lack of it on the servant's part. Elisha saw what the servant could not see; walking by faith he was not affrighted (John 14:1; Phil. 4:6, 7; Isa. 12:2; Ps. 56:3). In response to Elisha's prayer the servant's eyes were opened, yet he was not one whit more safe than before (v. 17). It is a striking contrast here with the Elisha of chapter 2:10. It is a suggestion of the Christian anointed by the Holy Spirit and that of the saved sinner before that experience. Our eyes need to be opened to see that "they that be with us are more than they that be with them" (v. 16). We need to see God's love, power and wisdom in nature, providence and grace. There is nothing incredible or unscientific in this experience. It is a rational and a glorious belief that Providence is working in our behalf through the unseen power of the Holy Spirit, the power of prayer and the answers thereto. The unseen is gloriously real.

III. Deliverance, vv. 19-23. In the first section we are taught the danger of a lack of vision. In the second section the emphasis is upon the need of a vision, whereas in this there is presented the use of a vision. To crystallize vision into experience is a difficult task for us all. Elisha prayed Jehovah, for whom he was acting, to smite the Syrians with blindness. This was not for vengeance, but (a) to teach the Syrians who the true God is (b), to lead Jehoram, the king, to go to Jehovah for help, and (c) to deliver the people from the raids of the Syrians. This word "blindness" (v. 18) conveys the idea of dazzling, visual bewilderment, hallucination and not of total loss of sight, thus making it easy for Elisha to lead them as he willed (v. 19). Mentally bewildered as a result of their physical ailment they failed to recognize the prophet. He did not deceive them, for they at last "found him" when he led them into Samaria and once more they could see. Within the walls of Samaria Elisha's prayer is again answered, their sight restored (v. 20) and they find themselves at the mercy of Israel's king. The older and wiser man Elisha, forbids the younger, the king, to use his advantage (vv. 21 22), but rather to heap coals of fire upon their heads by setting before them food (Rom. 12: 20, 21); within his power, such acts could not be attributed to fear. "Great provision" was made and after their departure we read, "so the bands of Syria came no more into the land of Israel" (v. 23). Elisha taught the Syrians the lesson of the power of Jehovah, and the dangerous position of those who refuse to see in him what he really is.

There are here presented three principal lessons.

(1) The foolishness of seeking to circumvent God or of thwarting his purposes.

(2) The protecting care God is constantly exercising over those who put their trust in him, and in his boundless resources.

(3) The lesson of making the right use of prayer and the answers which we receive, and to be magnanimous to our enemies.

God honored Elisha's prayer because Elisha acted according to God's Word (I John 3:22; Prov. 28:9).

WRECK OF PECO[illegible]

The Passenger Train Broke Through the Sagged Portion of the Trestle and Crashed on to the Work Cars Below.

Several fatalities resulted from a railroad wreck of a most unusual nature which recently occurred near Rainier, Wash. At the point where the tragedy happened the tracks of one railroad company cross those of another on a 30-foot trestle. A work train was passing beneath the elevated structure carrying a steam shovel on a flat car as a passenger train approached overhead. The heavy steel boom of the dredger suddenly became unleashed and struck out just in time to hit the wooden trestle violently and weaken some of its supports. Almost at the same instant the passenger train shot on to the sagging section, smashing through and falling on top of the work train. Only the observation car of the passenger remained on the elevated structure.—Popular Mechanics.

AS THE WORLD MOVES

ADVANCE OF RAILROADING IN ONE CENTURY.

Something Very Close to Perfection Has Been Reached in the Comparatively Short Time of a Hundred Years.

One hundred years ago the first locomotive in the world to successfully haul a load of freight upon rails made its maiden trip. Invented by George Stephenson, the "father of locomotives," it made its first run at Killingworth colliery in England. It had so many rods strapped to its boiler that it had the appearance of a huge grasshopper. It weighed about six tons. A pair of "walking-beams," resembling those of a modern side-wheel steamer, turned the four wheels. There being no cab, the engineer had to stand while the engine was in operation. It pulled eight loaded cars, which aggregated a weight of 30 tons, up a track that had a grade of one foot in an eighth of a mile. The test was a "grand" success, the engine running about six miles an hour. The first locomotive to draw a train of cars in the United States made its experimental trip in the Lackawanna coal district fifteen years later. This locomotive also was the product of Stephenson. It was called the Stourbridge Lion, after the place of its manufacture in England. Its American engineer, Horatio Allen, ran the engine over a track of hemlock rails for a preliminary test. Then he invited any gentleman in the gathering of spectators to accompany him. His invitation was not only refused, but he was urged to give up his foolhardy ambition. Laughing at his advisers, he pulled the throttle wide and "dashed" away at ten miles an hour.

Today more than 65,000 locomotives are in motion over the 250,000 miles of trackage in the United States. They consume about 150,000,000 tons of coal, and carry more than 1,000,000,000 passengers and 1,800,000,000 tons of freight annually. After adopting the English-born child of civilization, the United States took the lead in its development and application, until today it stands as the world's greatest manufacturer of locomotives. Besides making enough to meet the domestic demand, the American manufacturers are shipping locomotives abroad at the rate of a dozen a week to South America and Africa; they are disturbing the calm of the Orient, and are dashing from one end of Europe to the other, and have invaded the land of the locomotive's birth, England. Like the steamship, the locomotive is growing larger and more powerful every year. The largest reported to be in use today is a huge compound engine, which measures 120 feet over all, and weighs 850,000 pounds. It is an oil-burner and carries 4,000 gallons of oil and 12,000 gallons of water. It cost $43,830 to build. These giants have reached a point where one locomotive is so long that it is hinged in the middle with a flexible joint so that it can turn a curve without upsetting. Thus the locomotive has become the modern Atlas that carries the burden of the world's trade and population across the continents.

Railroad Advance.

Before the year 1880 most English railroad carriages had only four wheels and weighed ten tons. From 1880 to 1890 they had six wheels and weighed fifteen or sixteen tons; from 1890 to 1900 they had eight wheels and weighed twenty-four tons, and since 1900 the fashion is twelve wheels for dining and sleeping cars and the weight thirty-five to forty tons.

Railroads in China.

One of the greatest aids to commerce in China is the building of railroads. The country that will be opened up by the Szechwan-Hankow line is an empire in itself. The primitive transportation methods still utilized in the greater part of China hamper trade, and both natives and foreigners are anxious to secure more up-to-date transportation facilities.

Year Begun in March.

"March 25 once was the first day of the year.

RECORD WITHOUT A STAIN

Engineer Has Run Trains for Fifty-Two Years Without an Accident of Any Sort.

Fifty-two years as a railroad man and fifty years as an engineer on the New York Central railroad, without an accident or a black mark of any sort against him, is the proud record of Dennis John Cassin, who retired from the service on August 18 at the age of seventy years.

Cassin, an alert, keen-looking man, with a gray mustache and gray hair, does not show his age. Those who have seen him in the cab of the big locomotive that pulls the Empire State express from the Harlem yards at Albany would take him for a man of about fifty, but up at his trim little house at 597 Walton avenue, The Bronx, he has documents to prove that he was born on April 18, 1844, at Greenwich, now the City of Rensselaer. He became just fifty years ago on August 18 a full-fledged engineer.

His first engine was one of the old wood-burning "dinkies" that used to run between Westchester county points and the old downtown Grand Central terminal. As engine building progressed he got a better type of locomotive and finally he became the dean and the most trusted engine driver on the road. Despite the fact that he started in when that sort of work was in its infancy, he has kept fully abreast of the times and has passed all the examinations that up-to-date methods require of railroad engineers.

His proudest possession, outside of his family and his record, is a diamond ring he won some years ago in a popularity contest conducted by a railroad magazine, when he was voted, by a big majority, the most popular engineer in the United States.

In addition to the important duty of taking the Empire State safely to Albany at a mile-a-minute speed, Cassin turns around in the Albany yards and brings whirling back to this city another of the crack trains of the road, the Southwestern limited. Better than a mile a minute he makes at times with this train.

In his time Cassin has carried millions of passengers and he can spin many a yarn about the big men he has had in the coaches behind him. Governors of New York, presidents of the United States, bankers, merchants, mayors and famous persons of all sorts have ridden behind Safe Dennis Cassin. In addition to being the dean of the Central forces, Cassin is one of the oldest active railroad engineers in the world.

Life-Saving Devices.

Two patents, Nos. 1147464 and 1147465, have been issued to William A. Utz of Fort Worth, Tex., for devices for saving the occupants of locomotive cabs in case of accident. In one patent there is a cushioned and asbestos-lined carrier into which a seat may descend and the lid of the carrier is connected to the seat in such manner that as the seat descends the lid will be automatically closed. In the other patent the body of the carrier is composed of a series of steel rings telescopically engaging each other and folding against a stationary top, means being provided for holding the collapsed rings against the top and for releasing them so they may descend to inclose the one to be protected.—Scientific American.

Railroads Worth Billions.

The value of railroads and their equipment in the United States is placed by the federal census bureau at $16,148,000,000; of street railways, $4,596,000,000; of telephones, $1,081,000,000.

His Supposition.

"So much good advice is constantly being bestowed upon engaged couples, and so much of it goes unheeded," remarked Professor Pate, "that I am constrained to believe that love also laughs at jawsmiths."—Judge.

Products of Raisin Seed.

According to United States government experts, raisin seeds can be made to yield a clear syrup, an oil useful in paint and soap making, a tannin extract and a [illegible] stock.

TOLD AS TRUTHS

It is the man who has no right who generally comforts a woman who has wrongs.

Useful women have the monopoly of the kitchen tables, but ornamental women have the monopoly of the supper tables.

The most dressy people are certainly the most undressy just now.

The women who are the easiest to win are always the most difficult to lose.

Easy Way.

"Bosses at seaside cities ought not to have a hard time in carrying elections."

"Why at seaside cities especially?"

"Because there are always such a lot of floaters there."

Skinner's Business.

Hyker—What's Skinner doing now?

Pyker—He's in the pail business.

Hyker—Pail business?

Pyker—Yes; he's running a bucket shop.

SNAP SHOTS

Some men are afraid other men will steal their wives, and others are afraid they won't.

When it comes to a fight, the weakest bystander often can hold the strongest combatant.

Fortunately, the man with a hand like a canvas ham usually is too fat to swing it.

Speaking of capacity to assimilate punishment, John McBee has driven a hack for 37 years.

Rare Tribute.

"Garspur's jokes must be above the ordinary."

"Why do you think so?"

"I was at his house recently and I noticed they get a laugh in the family circle."

His Specialty.

The Boss—So you want a job, do you? Well, what can you do?

Applicant—Nothing in particular—but work is not so much an object as good wages.