

# THE RIGHT OF WAY

**T**HE president of the Great South-Western Railway Company tapped impatiently on the table. The other members of the board kept a constrained silence, and the second vice-president, in charge of extension, gazed longly out of the window. It was at him the president was directing his remarks.

"It is ridiculous," he said, "that we should be blocked by the obstinacy of one man in our endeavor to build this branch line. A casual observer would certainly suppose that the executive department of the company had sufficient brains to overcome such an obstacle as this. The situation is simple enough. Here is our road and here are the mountains in which the new strikes have been made. To develop them, machinery must be hauled in and ore hauled out. That means a branch line. One man owns all the land—me and foot-hills—between the railroad and the mines. We must cross his ranch, but he declines to sell a right of way. He is a pioneer and is bull-headed. He says the country was getting along without railroads when he came there, and that it can get along without them still. We must overcome his objections—but how? We offer to pay him well for all damage done, and he replies by suggesting that our grading outfit bring along one flat-car of coffins. He is certainly a contrary individual. Have I stated the case correctly?"

"You have," said the second vice-president, removing his gaze from the sign below to the map on the table, "with one exception. Colonel Shortally is not an individual; he is a community, and more; he is a corporation, because he owns forty thousand acres of land; he is a political party, because he employs more cow-punchers than you can ordinarily get together at a country dance; he is a law-giver, because of his wealth and the taxes he pays; he is a law-enforcer so far as he sees fit, because he can shoot straight and has men with him who can do likewise; he is a society, because his daughter, whom I have had the pleasure of meeting, is the most beautiful young lady in the Territory. What can a poor, ordinary railroad company do against such a combination? We cannot condemn until we can get a right of way from the board of supervisors, and he is the county government."

The president mopped his brow. His gaze wandered across the street and down seven stories. He arose and picked up his silk hat.

"All right," he said. "We must get across that ranch some way."

A cloud of dust was coming down the road. Theophilus Smith carefully watched it for a moment, and then turned Bucyrus among the bowlders by the roadside. Bucyrus was his mule. Just ahead of the dust-cloud appeared a frantic horse, tearing wildly down the road toward him. Now and then he could catch glimpses of a swaying buckboard and a young lady clinging to the seat. Theophilus, who was a careful young man, put his bristled pipe in the inside pocket of his jacket, drew his sombrero down tightly upon his head, and then disinterestedly watched the approaching manway. As the dust-cloud and its contents passed, Bucyrus wheeled, and they, too, went flying down the road. Through sand and over bowlders they went, horse, buckboard, mule and dust.

"Excuse me, miss?" said Theophilus, as he came alongside and reached for the bit of the running horse; "pleasant day, is it not?"

He gripped the bridle hard, pulled sidewise and backward, and Bucyrus cheerfully sat down to the occasion and slid. There was more dust, and then they stopped.

Theophilus rubbed some of the dirt from his eyes and raised his sombrero to the girl in the buckboard. She looked at him with wide-open blue eyes.

"I am very sorry," he said, politely, "to stop you so rudely merely to ask you a question; but will you kindly pardon me and inform me where Colonel Shortally lives?"

The young lady's lips quivered, and instead of replying, she burst into tears. Then, recovering from her embarrassment and fright, she drew a deep breath and smiled faintly, and, as the color came back to her cheeks, she answered:

"I am the colonel's daughter, and I will gladly show you the way home." Theophilus spoke a few words to the still restless horse, handed the reins up to the young lady, and led Bucyrus to the rear of the buckboard, to which he tied him.

"I suppose," said the colonel's daughter, as they started up the road, "that I should thank you for saving my life and my father's best buckboard. Really, I thank you very much. If you will stop at the house for dinner, I will try and show my gratitude with some tortillas and frijoles of my own cooking."

animal more riddleous, stupid, and idiotic than a mule, and that is the man who rides one."

"But your father doesn't know Bucyrus."

"Nor his owner," she rejoined, laughing.

They stopped in front of a long, low, adobe, ranch-house, with deep-set windows and doors. Ivy circled the windows and climbed to the eaves. A few fir trees, some tall blue gums, and a dozen palms stood in the front yard. The house was set far back, and the veranda that surrounded it was half-hidden in the green of orange-trees. A stream from the mountains ran through the orchard in the rear, its course marked by a line of cotton-woods and willows, that broke the monotony of the otherwise treeless mesa. On the other side of the creek, and at some distance from the house, were the corrals and stables of the ranch.

The young lady stepped lightly to the ground. "I will call papa," she said.

A few minutes later a tall man, heavy set, with a face like a fool moon in harvest time, his scanty locks somewhat grizzled with the first snowfall of the winter of life, came swinging down the walk with cane strides.

"How air ye?" he shouted before reaching the gate. "Glory tells me ye ketch'd that son of Satan that jest in time. I'm glad to meet ye." He seized Theophilus' hand and Theophilus tried to look pleased.

"Jack!" shouted Colonel Shortally. A dusty cowboy with a sombrero on the back of his head sauntered around the corner of the house. "Take that boss out beyond that 'n' shoot him. Come in Mister—er—"

"Smith."

"Dinner'll be ready by'n by. Whar'd that beast come from?" he added, pointing at Bucyrus.

"He's my mule," answered Theophilus.

"You don't say so! Sposed you know'd better'n that. Mules hain't no place on this ranch. Can't you find a greaser to give him to?"

"Bucyrus is no common mule," said his owner, calmly; "he knows more than any horse you ever saw. And he can run, too."

This last remark amused the colonel so mightily that he sat down on the porch and laughed heartily. A mule that could run! "I never yet clapped eyes on a mule that could ketch a yearlin' calf in a fair race. Must be a slow kentry you grow'd up in, young man." The colonel wiped his eyes and chuckled.

"Well, if I stay," said the defender of mules, determinedly, "I'll show you one mule that can run."

"Stay! Of course ye'll stay if ye wanten," said Colonel Shortally, cordially. "Ye kin hev your pick of jobs 'n' ef you must make a holy show of that mule, we'll provide the necessary accessories."

Theophilus stayed. He was handy with the lariat, rode a horse like a native and a mule a great deal better. He evidently understood all the marks and deeps of the bovine character, and very shortly won that for himself which he could not for his mule—the colonel's respect. When Bucyrus would head off a skillful stamper, Colonel Shortally would grumble something about "fools rushin' in," and when he would dodge a belligerent steer he would growl something about a "fool for luck." On the subject of mules the colonel and Theophilus continued to disagree. They argued the question morning, noon and night. The colonel pointed out the bad qualities of the mule; Theophilus grew eloquent over the animal's virtues. Glory smiled, but took no part in the discussion which resulted in the famous race at Craig's Corner—a race that is still memorable throughout all of the Poncho Basin country.

The colonel brought out a long-legged mustang that he had purchased across the border the year before. This mustang was a sad deceiver, and had lightened the pocket of many a cowboy who had backed a home animal against the imported stock. A light-weight Mexican rode him. A few minutes later Bucyrus ambled forth, wearing that surprised look of a mule when he is but half awakened from a sweet dream of peace with plenty of barley hay in it. Judge Arkansas West officiated as starter and judge. All the inhabitants of the Basin were on hand to see the race, and even old man Johnson stopped his sheep-shearing and came from over the range with all hands to enjoy the holiday.

At the start the mustang ran away from Bucyrus, and at the quarter there was room enough for a threshing machine between them. The crowd laughed and cheered. For some reason Glory did not smile. But when the animals reached the half, there was a change. Bucyrus seemed to remember that he was neither asleep nor working for the government. He began to run. At the last quarter there was silence, for the crowd was holding its breath. While the mustang and Bucyrus were coming down the home-stretch the colonel's countenance was interesting, and when Bucyrus passed under the wire something more than an ear ahead, the colonel collapsed utterly.

That night Theophilus showed a wonderful lack of good taste. He ostentatiously reviewed the merits of the mule family, and Bucyrus in particular. The colonel sat in sery silence and chewed his cud of bitter reflection, but finally, when Theophilus wound up by declaring that Bucyrus could outrun the Overland Limited from Craig's Corner to the mountain road crossing, a distance of a little over a mile, Colonel Shortally arose in his wrath and swore.

"I'll bet ye anything ye want that yer wall-eyed apology for a boss can't do anything of the kind," he said. "Will you bet my pick of any hundred unimproved acres on your ranch against Bucyrus that he can't?" quietly asked Theophilus.

"Sartinly," said the colonel, who, deep down in his heart, had a liking for Bucyrus.

"All right," said Theophilus; "if you say so, we will settle it to-morrow—going west." The colonel said so, and went to bed.

By the light of the stars that night a man rode hurriedly down to Craig's Corner, the nearest railroad station, and before dawn rode as hurriedly back to the ranch again.

The next day was another day of excitement in the Basin. The rumor of the novel race spread swiftly. That is why the Williams heard, way up in Rocky Gulch, that Colonel Shortally had bet his forty-thousand-acre ranch against a herd of mules that a certain swift animal of that kind could not beat the Overland Limited in a ten-mile race.

The wagon road ran for miles along the railroad track, so Bucyrus was not handicapped. The race was an even one up to the last fifty yards, when Bucyrus, by a tremendous spurt, shot ahead and passed the crossing with twenty feet of daylight between himself and the engine. But there are wisecracks in the Basin who shake their heads when telling of that wonderful race, and hint that the engineer was half asleep.

Colonel Shortally was a good loser, and he cheerfully invited Theophilus out the next day to choose his hundred acres. He was not the less cheerful because Theophilus the night before had made him a present of Bucyrus. Theophilus proved an amazing chooser. He took a narrow strip of land running from the corner up to Warder's Canon, at the foot of the mountains. To the colonel's jesting about his choice, he said something about it making a good race track.

About a week later Theophilus was enjoying one evening a quiet after-dinner smoke on the veranda. He was at peace with the world, when Colonel Shortally came up the walk. The colonel's face was like the sun shining red through a thunder cloud. He was too much agitated to speak for a minute, but when he did begin to talk his words were to the point. From his expressions one might gather that he was perturbed by the fact that Theophilus had sold a certain hundred acres of land as a right of way to the Great South-Western Railway Company. Colonel Shortally finished by declaring his intention of removing from the scene a stranger who had taken him in, and thereafter drew his revolver.

There was a rustle of a dress, a low cry, and Glory was sobbing, with her face on Theophilus' shoulder.

"Don't do it, colonel, unless you feel compelled to," said Theophilus, rising with one arm about Glory, "and unless you want to make Glory a widow. We were married two days ago."

Colonel Shortally's face grew white and the revolver slipped from his grasp. Glory was the dearest of all to him.

The president of the Great South-Western Railway Company looked across the street and down seven stories. Then he arose and picked up his cane and silk hat.

"Well," he said, "we won after all. That was cleverly done—cleverly done."

"Yes," said the second vice-president, "but the attacking force lost heavily. For the young man from my office who engineered the deal has married the colonel's daughter, made peace with the colonel, and at the last report was laying out a town at the terminus of our projected branch, and selling corner lots."—Argonaut.

**Census Work in Europe.**  
To the American observer of European census methods, one of the most striking characteristics is the decentralization of census work. In the United States the census is completely centralized; every person engaged in the work acts as an officer or employee of the federal government, and all expenditures for census purposes are made from the United States treasury. In most countries of continental Europe, on the contrary, both the labor and the expense of collecting the original census data devolve upon the municipalities, townships or communes.—Century.

**Eyesight of Fishes.**  
In the water fishes see only at very close range—about half their own length. This will seem perhaps unlikely to anglers, although some of them can cite instances showing that fish cannot see far. Snakes seem to have a very mediocre sense of sight. The loon, for example, does not see at more than a quarter or a third of its own length; different species are limited to one-fifth or one-eighth of their length. Frogs are better off, they see at fifteen to twenty times their length.

**Fishers of Newfoundland.**  
More than one-fourth of the inhabitants of Newfoundland are engaged in catching and curing fish for a livelihood.

According to your notion, what proportion of the people are "hard up"?

# Science and Invention

In the electric furnace of H. Goldschmidt, a ton of steel is made from the ore by 4,000 horse-power hours of energy, and from scrap iron by 1,300 horse-power hours.

Anemic persons and convalescents seeking strength find great benefit in the grape cure, which is an autumn attraction at Wiesbaden. The effects are explained by the sugar, which forms 25 to 50 per cent of the grapes.

The hot springs that contain living bacteria are much below boiling point in temperature, but J. Adams, of Dublin, reports having observed eggs of a certain mite (Tyroglyphus histosomus) that survived boiling for five minutes.

Traction tests with electric automobiles in London have shown a surprising increase of the starting pull on oil-paved pavements. A pull of thirty-nine pounds per ton was needed to start on dry asphalt, forty-nine and a half pounds on wood pavement and 104 pounds on dry macadam. On greasy asphalt a pull of nearly seventy-nine pounds per ton was necessary.

The wireless system of telegraphy has been tested successfully in the Coast Survey. Last summer, as an experiment, one of the surveying vessels, using short-distance apparatus, transmitted the half-second beats of its chronometer to a shore station more than sixty miles away, where they were automatically recorded on a moving tape. It is anticipated that for the determination of longitude the wireless system will eventually take the place of cable and telegraph lines.

Human life is possible under varied conditions, and, if a recent report is correct, British New Guinea has a tribe whose environment has made them incapable of walking. These people live in a swampy region, and, as walking and canoeing are alike impracticable, they remain constantly in their dwellings, which are built in the trees just above the marshes. Disuse has caused their limbs to shrink, while their trunks have become bloated, giving them an ape-like appearance and gait.

German experts say that wood which has been floated in rafts, or otherwise, gives a more trustworthy material for joinery and building purposes than does that which has been carted, or otherwise carried dry, to the sawmill and workshop. The reason is that while the wood is lying in the water its sap and albuminous and salty materials are dissolved out. If these substances remain in the wood they readily absorb moisture from the atmosphere, after coming out of the drying rooms, and the wood swells. Artificial processes of washing out the hygroscopic substances from wood which has not been floated are practiced in Germany.

In describing experiments made for the Department of Agriculture on the effects of lime and magnesia upon animal production, D. W. May of the Kentucky Experiment Station remarks that it is a well-known fact that the greatest development in live stock has been attained in limestone regions. He adds that in the blue-grass region of Kentucky, long noted for the beauty and quality of its live stock, and especially of its thoroughbred horses, the soil has been formed largely by the disintegration of a limestone very rich in phosphates. But even in that favored region experiments are under way to determine whether the quality of the animals may not be improved by the addition of certain mineral elements to the food.

## INCIDENTAL EDUCATION.

**Acquirements That Contributed Toward Success of Louis Agassiz.**

It does not appear that Louis Agassiz, the great naturalist, had as a child any precocious predilection for study, but his love of natural history showed itself almost from infancy. In "Life and Correspondence of Agassiz," by Elizabeth Cary Agassiz, his childish amusements are described. When a very little fellow he had, besides his collection of fishes, all sorts of pets: birds, field-mice, hares, rabbits and guinea pigs, whose families he reared with the greatest care. Guided by his knowledge of the habits and habits of fishes, he and his brother Auguste became the most adroit of young fishermen, using processes all their own, and quite independent of hook, line or net.

Their hunting grounds were the holes and crevices beneath the stones or in the water-washed walls of the lake shore. No such shelter was safe from their curious fingers, and they acquired such dexterity that when bathing they could seize the fish even in the open water, attracting them by little arts to which the fish submitted as to a kind of fascination.

Such amusements are no doubt the delight of many a lad who lives in the country, but they illustrate the unity of Agassiz' intellectual development from beginning to end. His pet animals suggested questions, to answer which was the task of his life; and his ultimate study of the fresh-water fishes of Europe, later the subject of one of his important works, began with his first collection from the Lake of Morat.

As a boy he amused himself also with all kinds of handicrafts on a small scale. The carpenter, the cobbler, the tailor were then as much developed in him as the naturalist. In Swiss villages it was the habit in those

days for the tradespeople to go from house to house in their different vocations. The shoemaker came two or three times a year with all his materials, and made shoes for the whole family by the day; the tailor came to fit them for garments which he made in the house; the cooper arrived before the vintage to repair old barrels and hogheads or to make new ones, and to replace worn-out hoops; in short, to fit up the cellar for the coming season.

Agassiz seems to have profited by these lessons as much as by those he learned from his father; and when a little fellow he could cut and put together a well-fitting pair of shoes for his sisters' dolls, was no bad tailor, and could make a miniature barrel that was perfectly water-tight.

He remembered these trivial facts as a valuable part of his incidental education. He said he owed much of his dexterity in manipulation to the training of eye and hand gained in these childish plays.

## INCONSIDERATE FRIENDS.

**They Did Not Do Things Exactly to Suit the Borrower.**

Eben Rawles was the town barber. The position would seem to most persons to be one which would deprive the incumbent of the right to find fault, but Eben took a different view of it.

"It beats all how long it takes some folks to read the newspapers," he said discontentedly one day to an idle listener. "Now there are the John Potters; a well-meaning family as ever lived, but they're downright thoughtless. Why, again and again when I step in for their paper first thing in the morning, they won't know where it is. Oftentimes I've waited as much as half an hour while they hunted up that paper, and then very likely there'd be one page missing, and nobody'd know just where it was."

"They haven't got any system, that's the trouble with 'em. It's a large family of different ages, and I suspect they portion off the paper in the evening 'stead of keeping it all together and reading it one at a time."

"I can manage better with their weeklies, for I told Mis' Potter I'd go right over Friday mornings soon as it came, and read it out on the porch. Then they could do what they were a mind with it afterward."

"But I experience my greatest trouble with the magazines," said Mr. Rawles, sadly. "I pledge you my word it's been ten days after a magazine was out, time and again, before I've got a sight at it. They keep it to read along the women folks do. It's a dreadful wasteful habit, but I can't make any impression on 'em. And when I get it," and Mr. Rawles assumed a stern expression, "it's ten to one if that youngest child hasn't been allowed to cut a picture out of it that just spoils some advertising article."

"To persons situated as I am all printed matter is valuable, and I hate to see such tampering with it; but we all have our trials, and I suppose discipline is what we need."

## EUROPE'S HIGHEST RAILWAY.

**Roarbed and Track a Fantastic Play of Turns and Loops.**

The Albulia-Engadine line, opened for traffic recently in Switzerland, is described by Emil Rueker, in Page's magazine, as the highest in Europe.

The line traverses scenery of great beauty. By turns and loops and by the steepest gradient the track leads now above and below the highway, through the Bergunstein, famous for its gullies and rocks, to Bergun, 4,500 feet.

Abruptly emerging from rocky defiles, the train passes Bergun, surrounded by the giant Albulia Dolomites, Piz Rognux, Piz d'Aela and the Albulahorn. During the last part of the panama the railway follows the slopes of the mountains. Between Muot and Naz parts of the railway may be seen above, below and on each side, with its chain of viaducts, galleries and bridges.

It is almost impossible to follow the convolutions of the line as by three-fold turns and loops it passes through tunnels suggestive of the St. Gothard and the Brenner Railways. After ascending more than 1,300 feet the line reaches the entrance to the main tunnel at Preda. The track is in its last part a fantastic play of turns and loops, from which, by an easy ascent, one reaches the pass of the Weissenberg and the Devil's valley, where the steep basin of rocks is crowned by the twin giants (Piz Glumells).

Here the Albulia chain is pierced by a tunnel more than three miles long, 6,175 feet above the sea and 3,900 feet under the Piz Glumells, passing the dividing ridge between the waters of the Rhine and the Danube—the highest standard railway track in Europe.

## Moved by Inspiration.

President Remsen, of John Hopkins University, who is one of the City College alumni, tells this story of himself and of James Godwin, who was for many years a tutor at his Alma Mater. Mr. Godwin asked young Remsen at recitation a question in mathematics which the latter was unable for the moment to answer.

"Next," said the tutor, turning to the student who was to follow. Just then, however, the answer came to Remsen, who began to give it.

"You must be beside yourself," generally remarked Mr. Godwin.

We would suggest to the men that when they get real mad, they take it out in shaking rugs instead of slumping doors.

# CITY LIFE WAS BULL.

"Not long ago I had an old gentleman from a rural village to visit me," said the suburbanite, "and he found New York dull. I never realized before how dull our place could be." The New York Times explains why the gentleman from the country found the city less lively than the life to which he had been accustomed. To most persons, particularly to city residents, the old man's point of view will be a new one.

"When at home the old gentleman was accustomed to go after his mail," said the city man; "so after breakfast one morning he said he would just step round to the postoffice and ask for the mail. We had to explain that there was no postoffice within two miles of us, and that we never visited the office; we just waited until the postman came round."

"When the old gentleman was balked of going to the postoffice, he said that he really must get shaved. Would we direct him to a barber shop? Then I had to tell him that I didn't know of a barber shop within a mile of the house. I shaved myself, and when I needed the services of a barber I found one downtown."

"That greatly surprised him, for at home his visits to the barber, a cheerful, neighborly, talkative fellow, are among the pleasant incidents of the week. It also set him thinking, and we had to confess under cross-examination that we hardly bought so much as a paper of pins in our part of the city. We did not patronize the little shops of the region. Everything we needed we bought in great shops ten miles away. We had to wait for most things twelve or even twenty-four hours, and if an article was urgently needed, we had to make a journey of something like twenty miles to get it."

"That seemed to the old gentleman an excellent joke on city life. His own village is about as far from the only near-by city of any size, as our house is from the heart of New York. It was plain enough that he thought we had returned to something like the conditions of the frontier."

"He was evidently comparing the inconveniences of our situation with the condition of his former friends a few miles from his village. He had always been sorry for them; he was just as sorry for us. Looking round upon the dense shrubbery near the house and the wall of woodland only a few yards away, he said, with a kind of shiver, 'No doubt this is a lovely place in midsummer, but it must be cold here in winter.'"

## GROUSE IS A CLEVER BIRD.

**It Evades the Hunter by Tricks that Display Its Intelligence.**

It has 100 tricks of defense. It will sometimes lie still until the hunter is within a yard of it, then soar straight upward in his front, towering like a woodcock; again, it will rise forty yards away, and the sound of its wings is his only notice of its presence. It will cover upon a branch under which he passes, and his cap will not be more than a foot below it as he goes, and though it has seen him approaching, it will remain quiescent in frightful fear until his back is turned. It will flush then, and when he has slewed himself hurriedly around he will catch only a glimpse of a brown, broad wing far away.

Wounded and falling in the open, it will be found—if it is found at all—with the telltale speckles of its breast against the trunk of some brown tree against which its feathers are indistinguishable, and the black ruff about the neck of the male will be laid against the darkest spot of the bark. Often it will double like a fox; often, as man draws near, it will spring noiselessly into some spruce and hide until he passes, dropping then to the ground and continuing its feeding; often, too, it will decline to take wing, though unhurt, and will run fast for a half mile—so fast that the most expert woodsman will be unable to keep pace with it. This it will do only on leafy ground and never when snow would betray its tracks.—Outing.

## Mark Twain and a Poet.

A new story is going the rounds about Mark Twain and a young poet. "How long does it take to get fame from a poem?" asked the poet.

"The sage thought and in a few minutes said: 'Well, it takes about four hours to write one and nineteen years eleven months thirty days twenty-four hours and fifty-five minutes to get it published! Then it's a toss-up whether it's famous or infamous.'—New York Times.

## Like the Salt-lick.

"D'Auber is home from his trip to the Rocky Mountains, isn't he? What sort of a time did he have?"

"Oh, he spent most of his time making sketches of the mountains. He showed me a lot of them."

"How are they? Natural?"

"Well—er—they're certainly rocky."—Philadelphia Press.

## Very Curious.

"The, e's a curious thing about an umbrella I bought the other day."

"Yes, indeed, that is a curious thing."

"What do you know about it?"

"Didn't you just say you bought it?"—Philadelphia Press.

One secret has been kept for many centuries; and that is the terrible worthlessness of the people collectively.

No matter how great a philosopher a man may be, he can never figure out how he caught a cold.