

THE SNAKE BUFFALO HORSE.

Boyhood Exploit of Montana Pioneer.

In the spring of 1864 some Indians from the great camp of the Blackfeet came to Fort Benton, Montana, for the purpose of renewing their supply of powder and ball. They reported the camp as situated on the Judith river, where game was unusually plenty, and said that the chiefs had decided to move in to the fort as soon as the women could finish tanning the winter's take of buffalo hides. The greatest piece of news they had to tell was about a buffalo horse they had captured during a battle with the Snake Indians. Never before had any of the people seen an animal so beautiful, swift and well trained. So great were its powers of endurance that its owner, Owl's Head, had killed 23 buffalo in a single run. Without the guidance of a bridle it would swerve to the right or left, go here or there according to the swaying of the rider's body or the pressure of his knee.

In those days, when the only commerce of the country was the fur trade, a good buffalo runner was the most desirable and useful piece of property a man could own. The voyageurs and other employes of the great trading company, therefore, listened with great interest to the stories these Indians had to tell about the horse, and each one determined to try to buy it. But had they only known it, they would not have wasted their time figuring on their chances. Major Steel, one of the partners of the firm, had himself determined to buy the animal. Not that he had any special need for it, but he loved to ride out on the plains with his men whenever his duties would permit a short absence from the fort, and when he did go he rode the best horse to be found in the land. He said nothing of his intentions, however, and bided his time.

One morning the people of the fort saw a long column of horsemen stringing down from the prairie into the wide flat across the river. It was the advance guard, the chiefs, head warriors and medicine men of the Blackfeet, and hurried preparations were made to receive them with the pomp and show so dear to the Indian's heart. As the head of the column rode slowly down to the river and across the ford the cannon and howitzers in the bastion began to thunder a welcome, to which the Indians replied by firing their guns and singing a song of war and triumph. Every one of them was decked out in all his war finery of embroidered buckskin, ermine fringe and fluttering plumes, and they presented an imposing sight as they rode their prancing horses up to the fort and dismounted at the gates. The heavy portals swung open, and the agent, Major Steel, himself, wearing a blue uniform and sword, stepped forth to greet them. After shaking hands with the whole party he invited them to the council room, where the great stone pipe was filled, lighted and passed from hand to hand around the circle, each in turn taking a few whiffs of the smoke. The agent and the chiefs meanwhile exchanged the news of the day. The Indians told of the prominent members of their tribe who had died of illness or who had fallen in battle during the winter; of the successes of their people against the enemy; of the large number of buffalo robes and pelts of beaver and wolf they had brought to trade for the white man's goods.

An hour elapsed, and the big pipe had been refilled many times. At last the women of the fort appeared, bringing in huge kettles of boiled meat and sugared tea, pans of stewed dried apples and hard bread. Here was luxury indeed! Meat was almost the sole food of the Indians—and the whites, too—in those times; a feast comprising sugared tea, hard bread and dried apples was something to be talked about and remembered for many a day to come. The kettles and pans were soon emptied, and the pipe was again lighted, and during the general talk which followed the agent asked Owl's Head for his buffalo horse. The Indian flatly refused to part with it for any consideration whatever, saying that he had risked his life in battle to capture it and that he loved the animal as he did his children. Major Steel, therefore, said no more on the subject, and presently the Indians, having each received a present of tobacco, went out and remounting their horses rode back across the river, where during their visit at the fort the great camp had moved in. Four hundred lodges now dotted the plain which had been desolate a few hours before. Thousands of horses were being driven to water or out on the hills to graze. From each lodge arose the smoke of the newly lighted fires. Hundreds of children played and yelled along the shore of the river; women gossiped and laughed with one another; dogs barked, horses neighed.

Early the next morning the great trade began and lasted for a number of days. The warehouses were emptied of the goods they contained and refilled with robes and skins. The women strutted about in new gowns of bright-hued calico. Every one had a new blanket. The men bought new guns, saddles, belts and knives; every one was happy.

One day, much to Major Steel's surprise, Owl's Head entered his office and handing him the end of a lariar said: "Mo-yok ko-tas." (Here's your horse.)

The agent went to the door and sure enough found that the end of the lariar was fast to the most beautiful horse he had ever laid eyes on. Black as a

coal, strong limbed and deep chested, with small head and delicately pointed ears, its neck arching gracefully as it pranced about restlessly at the end of the rawhide rope. It was the perfect embodiment of a swift and finely bred animal. It surely was of no Indian breed. The Snakes, from whom the Blackfeet had taken it, had, undoubtedly, got it in turn from some of the white settlements far to the south and east, or, perhaps, captured it from some luckless emigrant on the overland trail. The major, however, only glanced at the animal, for he did not wish to show the Indian how pleased he was. Ordering a passing employe to take the horse to the stables, he told Owl's Head to accompany him to the trade room, where he gave him various articles of merchandise far exceeding in value any price which had ever been paid for a horse in that country.

The corrals and stables had been built just outside of the fort and were commanded by the cannon in two of the great bastions. Here the horses owned by the company were shut up every night. During the day time they were sent out on the prairie to graze in charge of a herder, who at this time was a boy of 14 years named Joseph Kipp, now one of the prominent citizens and cattlemen of Montana. When Joe came in with the herd that evening the major sent for him and said:

"Well, my boy, I've finally bought that Snake horse. We'll call him Snake. Now, I want you to take him out with the herd daily and watch him closely until he has made friends with the other horses. Ride him occasionally, enough to keep him in good trim, for I'm going to have a buffalo hunt before long. Be careful, now, and see that you don't lose him, for without question he is the best bred animal this side of the Mississippi river, and I value him highly."

"Yes, sir," said Joe. "I'll watch him as you say. No danger of his getting away from me."

About two weeks after this conversation took place the herder corralled the horses one evening and then entered the major's office with a most dejected air.

"Snake's gone," he said shortly and with a suspicion of a sob in his voice.

"Why, Joel?" exclaimed the major, "how were you so careless as to lose him?"

"I didn't lose him, and I wasn't careless; he's been stolen." Then the boy broke down; but the major spoke to him kindly, and after a little he told how it had happened.

At noon he had driven the herd to the Teton, a small stream three miles north of the fort and given them ample time to drink while he ate his luncheon; he had then driven them back on the bench land to graze. It was a warm day, and along in the afternoon, becoming very thirsty, he rode back to the Teton for another drink of water. He was gone from the herd perhaps 20 minutes or half an hour, and on his return he immediately missed Snake. Scanning the country with his telescope he saw the horse, ridden by an Indian, just as they were disappearing in the breaks of the Missouri several miles east of the fort.

The major, of course, was greatly disappointed at losing his valuable horse, but he was a kind and just man, and after comforting the boy the best he knew how he sent him to his own quarters for supper.

Nearly all the employes of the trading company were married to Blackfeet women, and hardly a day passed but some of the relatives of their wives visited the fort. Through some of these visitors it was soon learned that Owl's Head himself had stolen Snake. After the big trade the camp had moved back south a few miles to the Shonkin, where wood and grass were more abundant, and the buffalo horse was running with the Indians' herd. But that didn't help matters much. There was no such thing as law. Within the walls of the fort the trading company was supreme. Beyond the range of the cannon and howitzers the Indians ruled the land; might was right. Also it was the policy of the traders never to quarrel with the Indians. Perhaps the major soon forgot his loss; he had great affairs to keep his mind busy; but it was different with the boy Joe. During the short time he had kept Snake in his charge he had learned to love the beautiful animal and longed to regain possession of it. Then again the tenants of old Four Bears, a great gossip, who was always riding back and forth between the camp and the fort, fairly set him wild. The old fellow brought almost daily reports of the number of buffalo Owl's Head was killing with the aid of his swift horse.

"Such a horse! Never was anything seen to compare with it. What power of endurance, what speed, what sagacity that wonderful horse has!" With a malicious leer he would say to Joe: "Ah, boy, you ought to see that horse. If once you saw him I know you would want to own him."

This was too much for Joe, and his heart almost bursting with indignation and injured pride, he would rush from the room out into the cool night air lest he should be tempted to strike the old Indian dead where he sat. One evening Four Bears was more tantalizing than ever in his stories of the wonderful horse, and when, as usual, he drove Joe from the room, the boy went straight to the major's office and asked to be excused from herding for

a day or two, saying that he was not feeling very well; he did not dare to say what he really wanted a holiday for, as he feared a refusal. Of course the major granted his request, and Joe left the office with a lighter heart than he had had for many a day. First he went to notify a man the major had designated to take the herd out in the morning, and then he repaired to the quarters of old Baptiste Roudin, the company's hunter, to consult with him about his plan, which was no less than the stealing of Snake out of the Blackfeet camp. The old voyageur entered into his scheme with enthusiasm, and bidding his wife prepare a small sack of food and fill a canteen of water for the boy he began to plan the proper course to pursue. Joe listening with the closest attention. When everything was in readiness the two slipped out of the fort through the small gate, hurried down to the shore of the river, where a skiff was tied, and in a few minutes Joe was safely landed on the opposite side.

There is a sense of location, of direction, possessed by all true plainsmen, at once undefinable and inexplicable. Joe had been told where the camp was located and had often passed the place in times gone by; so now, as if by instinct, in the darkest of nights, without guide or landmark, he traversed the six or seven miles of rolling prairie between the two streams and in the course of a couple of hours found himself overlooking the great camp, which was pitched by the creek in the valley below him. The lodges, illuminated by the fires within, were plainly seen through the intense darkness. He could hear the beating of tom-toms and singing where a party of young men were practising a war dance; the sounds of laughter and scraps of conversation floated up to him plainly through the heavy night air; innumerable dogs barked and yelped in answer to the howling of the wolves skulking about the neighboring hills.

Joe well knew that somewhere in the great camp Snake was tied close to the doorway of Owl's Head's lodge; he also knew that it would be certain death for him to attempt to enter the camp while the people were still up and awake. Equally hopeless would be the task of finding the lodge and the horse after the people had retired and the light of their fires died out; in the thick darkness one horse could scarcely be distinguished from another. His best chance, as the old voyageur had predicted, was to follow Owl's Head's tactics and, watching his opportunity, steal the horse from the herd as they grazed about on the hills during the day. Having made up his mind to do this, Joe crawled into a thick patch of cherry and service berry brush he had stumbled against and, hoping he was not intruding in the haunt of some rattlesnake, curled himself up for a sleep with one hand resting on his rifle, ready for any emergency.

When the boy awoke it was broad daylight, and, peering through the bushes, he saw the horses stringing out to both sides of the valley as the early rising women unfastened their tethers and turned them loose. Taking his telescope from its case, he carefully adjusted it and closely examined the horses already grazing out from the camp; then he looked among those still tethered in the village. His heart leaped as he discovered Snake tied by the doorway of a red-painted lodge. A woman came out, untied the lariar, and, with long, graceful leaps, the beautiful animal hastened to join its mates on the other side of the stream. Joe watched them sadly as they moved up the side of the hill, stopping for a bite here and there as they went, for his chance to steal the horse that day was gone; he could not possibly cross the valley without being discovered. He went some of the brush in the centre of the patch and interlaced it in that standing about him to screen more effectually his hiding place and then ate a little of the food he had brought along.

The hours dragged along slowly. The sun crept up in the sky and beat down on him unmercifully. The canteen of water was most precious now, and he drank of it sparingly. All day long he lay there in the stifling heat, and it seemed as if night would never come. People came and went over the hills in all directions, often passing close to the patch of brush. Once a couple of men came and sat right at the edge of it and conversed for a long time. Joe scarcely dared to breathe for fear they would hear him, and he gave a great sigh of relief when they finally arose and went down the hill to the camp. At noon all the horses were driven in from the prairie to water, and at sundown they were again driven in, watered and tied up about the lodges for the night. With his telescope Joe saw Owl's Head himself catch Snake and after petting it and stroking its glossy neck tie the animal close to the doorway of the lodge. The boy now knew just where the horse was to be found. Time and again he had mapped out the route from his hiding place to the lodge—down the hill to the west end of the camp, then three lodges to the left, and from there it was the second one toward the creek. When it was quite dark he went down to the creek, some distance above the camp, drank long and deep of the cool water and bathed his face and head. The lodges were astir with life and light, and it seemed as if the people would never tire of their dancing, gambling and story telling, and go to bed. Finally, however, the lights of the fires died out, one by one, until all that part of the camp about Owl's Head's lodge was dark and silent. Farther away a big dance was still going on, but Joe could wait no longer.

Going to the edge of the camp he moved as slowly and cautiously as a panther toward the lodge. He trembled a little, and there was a choking sensation in his throat as he strove to

distinguish each dimly seen object in front of and about him. He was afraid, sorely afraid and scared, as any man would have been entering the camp of a hostile people in the dead of night. But he would not give way to his feelings and retire, and at last he stood in front of Owl's Head's lodge and put his hand on Snake's satin-coated side. There was no mistake; no Indian horse ever wore such fine, smooth hair as that. With trembling hands he placed his lariar around the horse's neck and then took out his knife to cut the other one which tethered him; just then his rifle slipped from his grasp, and the iron-plated butt struck a stone with a metallic clink. How his heart seemed to stop at the sound! But now the rawhide thong was cut, and dropping the knife Joe leaped on Snake's back with a mighty bound. At the same instant there was a blinding flash of light from the doorway of the lodge, a deafening report and the ugly whizz of a ball singing through space. Snake leaped so suddenly at the flash of the gun that Joe was bounced far back on his rump, nearly falling off; but he quickly regained his seat, and together they went flying out over the flat and up the hill, urged on by the shots and yells from the awakened camp.

Long before morning the people of the fort were aroused by the sounds of yelling and pounding at the gate. With guns and lanterns the men rushed out to learn what the trouble might be. A well known voice called out to open the gate, and when the great door swung back Joe, proud and smiling, rode Snake into the yard. The voyageurs shouted with joy at the sight, rushed up and grasped his hands, asking questions faster than he could answer them. As he slid down from the horse's back, the major came up and patting him on the shoulder said: "Well done, my boy; well done. From this day you shall be a voyageur."

—New York Sun.

QUAINT AND CURIOUS.

A strange clock was made during the last century for a French nobleman. The dial was horizontal, and the figures, being hollow, were filled with different sweets or spices. Thus, running his finger along the hand, by tasting, the owner could tell the hour without a light.

In Japan most of the horses are shod with straw. Even the clumsiest of cart horses wear straw shoes, which, in their cases, are tied round the ankle with straw rope, and are made of the ordinary rice straw, braided so as to form a sole for the foot about half an inch thick. These soles cost about one cent a pair.

A woman out bicycling lost a jeweled scarf-pin, which she much valued. She did not miss it till the end of her journey, and as she had ridden twenty miles the prospect of finding it seemed small. She, however, gave notice of her loss to the police. On her return journey, when about a mile from home, she punctured the tire of her machine, and on dismounting to discover the cause found the pin sticking in the tire.

William Decker of Shepard, Ind., an eccentric individual who had been an infidel for many years, was buried a few days ago. Two years ago Decker had his coffin built, and, according to his wishes, he was buried in his front yard. The coffin was painted a bright red. On a headstone at the head of the grave was inscribed: "Here lies the body of William Decker, who always paid 100 cents on the dollar." The funeral services were conducted by an attorney instead of a minister.

The most expensive material ever produced for a dress is said to have been purchased by the German Empress last year from Lyons. It was white silk brocade, having flowers, birds and foliage in relief, and cost \$125 a yard, the actual value of the silk, it is said, being \$100. The empress was so struck with its beauty that she had not the heart to cut it up, and it was eventually turned into curtains. The price paid for this material is about double as much as the famous cloth of gold that Louis XIV had made into a dressing gown.

A shell-fish known as the pianna in the Mediterranean has the curious power of spinning a viscid silk which is made in Sicily into a regular fabric. This silk is spun by the shell fish in the first place for the purpose of attaching itself to the rocks. It is able to guide the delicate filaments to the proper place and then glue them fast, and if they are cut away it can reproduce them. The material when gathered—which is done at low tide—is washed in soap and water, dried and straightened, one pound of the coarse filament yielding three ounces of the fine thread, which, when spun, is of a lovely burnished golden-brown color.

Charitable Spaniards.

Foreign residents of Spanish cities are amazed to find that the relentless butchers of Moriscos, Lucayans, Netherlanders, and Cuban insurgents seem to be the most charitable people on earth. The famished citizens of Cadiz and Havana shared their pittance with still poorer wretches. Without a poor-tax, Spanish communities of 50,000 self-supporters feel a pauper population of 5000 to 7000. Public hospitals are thronged with ministers of mercy. Nor should we shrink from the confession that in the land of Torquemada, minors are treated far more kindly than in Puritanical Great Britain. There are Spanish towns where Charles Lamb's Autocrat of the Grammar-school, child-torturing Boyer, would have been torn by a raging mob. —Felix L. Oswald, in the Arena.

FOR FARM AND GARDEN.

Kerosene Emulsion for Poultry.
The kerosene emulsion used as a spray for the garden is excellent as a wash for scaly legs of poultry, and nothing is better for lice in the chicken house than a good wash of it applied to the sides and roof of the house with a spraying pump.

Lengthen the First Milking Period.
An authority claims that if you want your heifer to develop into a profitable cow you should extend her first milking period as far as possible in order to promote and fix the milking habit. A cow to be really profitable must give a good yield of milk for at least ten months in the year, but it will be difficult to get her to do this if you do not milk her the first year just as long as possible—even beyond the period when there is profit from her product.—Weekly Witness.

Fertilizer for an Apple Orchard.
A fish and potash fertilizer will do no harm to an old apple orchard on dry land, but we would not put on too much of this mixture, because it is so nitrogenous that it might force too great a growth of wood. Ordinarily bone and potash, or bone meal and wood ashes are among the best fertilizers for apple trees of all ages. There is little danger of the ordinary farmer putting on too much fertilizer in the orchard, as in most cases 200 to 400 pounds is all that is used and twice or three that quantity will do no harm. It ought to be put on at once, as the trees are already well started and it would have been better had the plant food been applied last fall or on the snow. A little air-slaked lime in the potato hill will do no harm, but we doubt if it will keep away the white grub to any extent.

The Soy Bean as a Farm Crop.
The Purdue university, Indiana agricultural experiment station, has recently issued a bulletin treating of this new and promising leguminous crop, stating that it has been successfully grown in different parts of Indiana, as well as further north in the United States, thriving well in good corn soil and growing wherever corn can be successfully produced.

We have so many other good leguminous crops available for the southern states that this bean has not yet attracted the attention of our agriculturists that perhaps it may deserve. It is said to yield per acre from 9 to 12 tons of green fodder, from 1 1/2 to 2 1/2 tons of hay and 10 to 40 bushels of seed, according to its variety, the condition of the soil, etc.

In food value it compares favorably with clover hay. The seed is very rich in protein and can be fed advantageously with corn, but they should be ground before feeding. The price of the bean seed is so high, \$2.50 to \$5.00 per bushel, as to seriously interfere with the development of this as a farming crop, and farmers are advised to begin growing it in a small way and thus to learn from their own experience what to think of the crop.

Producing Redtop Seed.

Redtop seed of fine quality is grown on our prairie soil in large quantities and usually with a fair profit, depending in a great measure upon the character of the soil, writes G. M. Davies of Wayne county, Illinois, in the New England Homestead. Very little is grown on the white oak soils. Seed is usually sown in February on corn or oat stubble or ground prepared in the fall. Fall seeding after cowpeas or buckwheat will usually produce fine seed the next year. Spring seeding is always mowed about the 1st of August, but produces little seed. The grass, when ripe, is cut, cured and stacked as for hay. Threshing is done with a small grain separator, removing part of the concave teeth and shutting off the blower. A No. 22 screen is used as a rule. The best machine for threshing red top seed has not appeared. For the best results we depend on the experience and good judgment of the machine manager. The seed is sacked in five bushel burlaps and sold in the chaff.

Dealers base their prices on the amount of clean or export seed in a bushel of 14 pounds. There are no regular market quotations, the price running with the supply and demand. For sowing I prefer the clean seed, 3 1/2 pounds to the acre. The hay threshed makes good feed, but it is too short to handle easily. One of our growers runs a baler behind the thrasher, one engine pulling both machines. This saves all the hay. Redtop is our best pasture grass, growing well on thin, dry soils, standing close grazing and any amount of tramping. Is self-seeding, much easier to get a stand of than timothy. If properly cured it makes good hay. It is a surface feeder, leaves few roots in the soil and has a poor reputation as soil improver. This county produces about all the redtop seed harvested in the United States. The soil and surroundings seem especially adapted to the crop and farmers have become skilled in its culture and are looked to for the annual supply.

Butter Color Is to Blame.

If oleomargarine were put upon the market undisguised and sold honestly for what it is there could be no ground for complaint, either moral or legal. If people knowing what it is deliberately buy and use it, they have a perfect right to do so, and any law forbidding its manufacture or sale would be not only unfair and unjust, but in direct violation of the letter and spirit of the rights of American freemen. But there is, we presume, no case on record where uncolored oleomargarine

was offered for sale as oleomargarine and sold for use as a substitute for butter. If it were not colored to resemble butter the amount sold would never trouble any butter maker. In fact, if there were no butter color there would practically be no oleomargarine sold. It is in coloring it, shaping it and stamping it to resemble butter that the fraud consists. It is against the butter color that the law is aimed.

In the same way so-called butter, ringed, streaked, striped and spotted, without regard to previous condition or composition, is colored and moulded to imitate first-class butter. The original stuff out of which this process butter is compounded is but little, if any, better than the raw material of oleomargarine. But butter color cures all defects for the purpose of sale, just as with oleomargarine.

Against this and process butter all real dairymen wage open and relentless war, but with the utmost inconsistency they take the very same butter color and use it precisely as the oleomargarine and process people do—for the same purpose, too; that is, for giving their butter a uniform and attractive color, the color of the best butter when at its best—Jersey butter from June grass. The difference is of degree and not of kind—of bad, worse, worst. The whole practice is inexcusable!—Jersey Bulletin.

Successful Duck Breeding.

G. H. Pollard of Massachusetts, who is one of the largest and most successful duck breeders in the United States, in an address delivered recently before the Rhode Island Poultry school said: Let us begin with the location of the plant, and that may be almost anything that you can get. While water is one of the almost necessary points, there are many leading breeders who do not have water running through their yards and do not consider it necessary. In establishing a plant, if you could select just what you wanted I should advise you to choose a place with a good sized pond or running stream of water, for in that way you would gain in the fertility of the eggs.

The Pekin duck we advocate altogether because of the deep keel. In the improved type the breast line should be nearly parallel with the back and the breast should be nearly the same length as the back. The old line bird is something the shape of a Bartlett pear. Of course it is possible with the old type of bird to get a heavy weight, but the weight does not come in the right place; it is mostly back of the legs, which is where most of the waste comes, and there is no frame to build on. In selecting birds for breeding I would choose preferably birds that only weigh from six to seven pounds apiece alive, and mate them carefully with medium-sized drakes. We used to mate five ducks to one drake, but now I should like to mate up in single pens one drake with five, six or seven females.

We feed them lightly until about the 1st of November, when we generally mate them. I am trying not to force them this year, thinking that it destroys the vitality of the birds and the fertility of the eggs, and so we are feeding what we call "harmless food"—largely clover, perhaps one part clover and three parts bran and two parts corn meal, and we have not fed any meat scraps yet. It is not the question how many eggs they lay, but what we get out of them. I have never kept a very accurate account of the number of eggs, but I do know that they do not lay anything like 140 eggs, such as the records we often see printed in the papers. As a rule we get less than 100 rather than over. I think that 90 is nearer what we really get. Now if we get only 90, it is a great point to get 50 good eggs, rather than so many poor ones. It is not the point to get a large number of eggs, but to get fertile ones. By forcing we destroy the fertility, yet the eggs are quite profitable if it does not take too much out of the breeding stock to get them. I would prefer not to have them begin to lay before some time in February. The first few eggs laid will not be very valuable, they are almost always infertile; perhaps the first two or three eggs from each breeder, and the first machinefuls do not average more than 40 per cent. fertile.

If you hatch 25 per cent. of them it will be doing well. If you try the eggs you will see that 35 or 40 per cent. comes nearer the average. After starting to hatch with hens and machines you will probably find that you average more with hens than machines, but if you average in either case 50 per cent. you will be doing fairly well. From the 40 per cent. you will naturally expect to raise 85 to 90 ducklings, and that is all that you can expect, and 75 per cent. will often cover those raised by experts.

We feed the old breeding ducks, before we begin to force them for eggs, about a third clover and sometimes plain hay and the rest bran and meal. The idea is to fill them up with something bulky and when they begin to lay we begin with five per cent. of beef scrap and work up gradually, until in a week or so we will be giving them 10 or 12 per cent. We keep water before them all the time. At a season of the year when it is possible we let them have it for swimming.

Automatic Railroad Gates.

Berlin's Society of Railroad Interests offers a prize of \$500 for an acceptable scheme for automatic gates at railroad crossings. The provisions are that the gates must be closed by the oncoming train about two minutes before the train reaches the crossing and opened automatically immediately after the train has passed the crossing. The directorates are eager to find something better than human employes to depend upon for the protection of their railroad crossings.