

MYNHEER JOE.

BY ST. GEORGE RATHBORNE.

CHAPTER XVIII.

CHAPTER XVIII.

[Continued.]

Their first day in India has passed, and, as we have seen, it has not been without its adventures. If the second is kept up their stay in Bombay must be an eventful one.

One of Joe's first duties upon visiting the barracks is to deliver a message from the commandant at Cairo, which probably contains information respecting Baron Popoff; for the officer who made it looks very grave, and asks the American many questions concerning the doings of the Russian, which Joe, fortunately, is in a position to answer.

At this time England is greatly disturbed over the actions of Russia's ruler. He is said to be making preparations for pushing south through the Afghan territory to a point where his troops will be knocking at the door of India. A great railroad is about to be built for strategic purposes, and no one positively knows where it is aimed at—meaning no British subject.

Hence, the appearance of a shrewd Russian diplomat and secret agent, the baron, upon the soil of India, is likely to create a sensation. His name has been connected with numerous unscrupulous political moves in Bulgaria and Roumania, and all along the Balkans, so that it long ago became thoroughly known to all the reading world. Those who watch the moves upon the chessboard of Europe can see deep purpose in every action, however careless it may appear to the casual looker-on.

Those officers stationed in India have, of course, a peculiar interest in everything the White Star does. They are threatened by no other nation. France is busy in Tonquin and Algeria; Germany in Central Africa; Italy in Abyssinia, while Austria has no foreign policy, and Spain is concerned almost wholly in her West India possessions. It is Russia who stretches her vast domains across the Atlantic to Pacific, and yearns to reach the Indian Ocean as well. Year after year she placates the tribes en route, slowly but surely stretching her hand nearer the prize. The day will come when the fiercest war that Asia has ever known will be fought on neutral territory between these two giants. One has only to travel to India by the overland route, via Herat, to see the evidences of Russian encroachment. Almost to the gates of India the traveler finds here and there along the road Russian robats, or small wayside houses of refuge, erected through charity, where the weary pilgrim can pass a night without any charge for the shelter.

No reasonable man doubts that England must some day be prepared to fight for her Indian empire; nor is there any reason to believe that she will be able to hold her own against that cunning foe who would creep in at the back door while the mistress is engaged in sweeping and garnishing the front of the house. Whatever may be the mission of the baron to India, now that his presence is known, it is not likely that he will be allowed to go about without some sort of secret espionage.

When the evening meal has been disposed of, Sandy and Mynheer Joe decide to see what Bombay looks like after nightfall. So they dress as quietly as possible, not forgetting to carry their firearms, as there must always be a certain amount of danger traversing the streets alone.

Mr. Grimes hopes to be all right by morning, but thinks he had better rest until then. Molly complains of a headache, probably the result of her exciting race for assistance, and begs to be excused. This has a influence upon Mynheer Joe in inducing him to accept Sandy's proposal that they take a stroll, for he has no desire to spend the evening alone. Demosthenes complaining of bruises received in his tumble, which he wishes to bathe.

Peace reigns in the neighborhood of the little hostelry near the foot of Malabar Hill, save in one quarter. Joe draws the attention of his artist-correspondent comrade to the rear of the hotel, whence loud voices of discussion come. The row seems to be between the bobajee and a mussajee under him. The cook berates the scullion and the latter assumes a ridiculously dramatic attitude, with his head cocked on one side. Sandy eagerly takes it in. If he could only reproduce that scene on paper, it would be a dandy. At any rate, his memory is good, and he may succeed.

As they walk on in the soft, balmy moonlight, the angry voice of the bobajee continues to float after him. Finally there is a hubbub, and they know he has launched forth other arguments than mere words.

It is not long before they have reached the native quarter. Perhaps some unusual festival is taking place; at any rate, the shops and bazars are lighted up and throngs are on the street. As in the densely populated cities of China, the people of Bombay seem to have no particular time of rest, unless during the hot part of the day their enthusiasm dwindles to a low ebb. Night's cooling breezes bring them all out-of-doors, and the noise reminds a traveler of carnival time in Rome.

Lanterns of every color, made of paper or muslin, hang about the streets and in the shops, sending a strange light upon the picturesque crowd. Sandy's artistic soul is charmed by the spectacle. He seems to forget the tire of striking it in, no detail escaping his eye, and all the while he utters exclamations that are indicative of his surprise.

As for Mynheer Joe, he is more reserved in his manner, and yet enjoys the sight almost as well as the correspondent.

They seem to excite no curiosity as they move along. The natives are accustomed to meeting English-speaking people at all turns; slowly but surely they are leaving the ways of their ancestors, already more than two million having become Christians.

England allows full freedom of worship. The only thing she set her iron heel upon were some barbarous customs, such as the juggernaut-car and its slaughter, the putting to death of widows when the head of a family died, and like practices, for which Brahmins, farces and museumians alike have actually become thankful, as these things were relics of ancient barbarism that clung to the country.

Such sights the two travelers look upon—here is a retail grocery with many odd things upon the shelves, and the queerest object about the place is probably the banja himself; indeed, Joe declares he must be a natural clown from his dress, while Sandy berates himself for not having one of the new style little cameras with him, by means of which he could secure a masterpiece for a subject.

Next door is a sheik-like shop, where all manner of bric-a-brac may be found, anything that is bizarre having a place, and the Hindoo proprietor, smoking his hubbie-bubble nodis wearily over his Koran.

Here are some snake-charmers, such as exhibited their tricks and horrid pets upon the square of Eschelyeh, in Cairo. Then comes a merry fakir, known as a bickharrie here, shouting out his wares. Next we have some mountebank athletes, performing wonderful feats in agility, with perhaps a wizard who can make a tree grow in the middle of the street, with full-sized leaves and birds singing in the branches; while it is not uncommon to run across a group of howling dervishes, who take the place of our New York little German band, making night hideous in a certain locality, passing the hat around, and then forced to move on by indignant shopkeepers, who are glad to buy them off.

All of these sights and many more can be seen around the streets of Bombay. Occasionally an elephant looms up, but these animals are found more in the interior. Of monkeys there is no end. One need not be at all surprised to feel his hat suddenly jerked from his head, and, looking up, see an agile fellow climbing to the top of a house with it. Then the monkey-police have to be summoned and various maneuvers resorted to in order to recover the lost headgear.

One wonders why these things are allowed until he discovers that the Hindoos, as a class, are believers in theosophy. They look upon these animals as unfortunate human beings undergoing punishment for some past.

Thus there are many things going on all the time in this strange city. One need never grow weary with seeing the same sights, since there is a constant variation. The blending of bright colors in the shifting panoramas is what pleases Sandy most of all, and he is ever on the watch for a new variety of turban, of which there seems to be an endless number.

Mynheer Joe has given Kasee the freedom of the city during their stay, well knowing that the intelligent Hindoo will not abuse the privilege. As Kasee has been informed concerning the baron and his ways, it may be presumed that he will keep a jealous eye upon the Russian. This is what Joe wishes, for he knows that, as a spy, his servant has no superior.

To the surprise of the travelers they discover this same Kasee walking along the street in company with another Hindoo, and both of them seem to be in rather a convivial frame of mind.

The servant happens to catch his master's eye, and makes a rapid hand-signal that gives Joe solid satisfaction, since it tells him that the other is on the alert, and means something by his actions.

Sandy does not see this side-show. He is eagerly taking in the sights, and as they have now reached a portion of the grand-bazaar street where the lights are more plentiful, and the shops present the finest appearance, it is really worth his time to observe these things.

Here is a sannar, or goldsmith, displaying his quaint wares in a most attractive form, and by eloquent silence inviting the passers-by to purchase. Then there are curiosity shops where a thousand and one queer things have been gathered from the four ends of the earth. Perhaps the next place will belong to a mosaic worker, and his shop is certainly a model of neatness.

At a turbanmaker's Sandy stops some time to see the yards of costly cloth twisted into odd shapes, each left being afterward pointed with gold or silver cloth. These turbans are the delight of the Hindoos, and the man who has a new shape is the envied of his fellows.

After this comes a variety of shops, from silversmith's down to the durrack, or tailor's. Our friends take it in, and will never in all likelihood forget the sights their eyes rest upon. The crowd is such a good-natured one, and not a single word is said, not a push and shove as crowds generally do. In their long walk the two friends do not remember having touched but one man, who stumbled against them and then rushed away as if filled with alarm. Sandy, recognizing an old game of the thieves in London and Paris, at once looks to see if his watch is all right, and upon finding it so is relieved.

"Well," remarks Mynheer Joe, at last, "the hour is late. Have you seen enough for one night, old fellow?" Sandy nods.

"I've been a crumpled ball of ideas, which I could not put into some shape before I sleep. This has been a revelation to me, Joe. I never before saw such life as the old Bombay presents. Think of the rough sketches I've already drawn—the weird Towers of Bhamra, the wonderful burial-place of the Brahmins—that magnificent statue out on the streets—the Parsi broker—what's his name—the Parsi broker—'Jamaetee Jespeehy,' smiles Joe.

"Drops from your tongue like oil, old fellow. I must practice on these names. About the sketches: I have the harbor, the strange coasting-craft you pointed out, a patamar with its two masts, the small rakish canoes and the long, narrow falucca with its lateen sails. Besides, I've got glimpses of mosques, that lovely lotus, and an array of such things, to say nothing of the ideas now in my head which, roughly drawn, will fill pages in the note-book. Yes, I'm in clover, Joe, and—"

Mynheer Joe has left his side, which fact causes the voluble Sandy to turn around—no discovers his companion talking earnestly with a Hindoo, and, looking more closely, recognizes Kasee, whose brown face is very serious, and whose whole manner proclaims that there is trouble brooding in the air for the Americans in Bombay.

CHAPTER XIX.

THE FATAL THIRTEEN.

Sandy chances to be a wise little fellow, and evinces no surprise at the state of affairs. He guesses instinctively that Kasee has made a discovery of some importance, and is now communicating the result of his work to the master he loves so well.

Somehow it seems quite natural that they should get into a tangle, that mystery should crop up around them. They are surrounded by strange scenes, which the human mind could hardly imagine without a positive experience. The very air of India seems to breathe of mystery, as though it were impregnated with it.

He watches Mynheer Joe and the Hindoo with considerable curiosity, while keeping an eye upon the crowd near by, as if seeking to discover whether any one else is interested in them.

Joe now appears to be questioning his faithful servant, as though he has heard it all and knows that it is serious. At the same time he does not exhibit alarm, for his experience has been great in the past, and he knows how to preserve his mental equilibrium in the face of the most astounding difficulties.

"Ten to one it's all on account of that miserable Russian. I expected to hear from him again. What in the deuce is the sly rascal up to now?" mutters the correspondent, as he twirls his cigar between finger and thumb and keeps his eyes fastened upon his friend.

Joe looks around him, as though seeking the danger of which he has been warned. Then their eyes meet. The traveler cannot help but note the eager look upon the face of Sandy. He smiles and beckons to him.

This, of course, means that he is to be in it; and as the correspondent usually manages, by hook or crook, to get there, he feels satisfied that matters are shaping themselves all right. It suits him to meet difficulties as they fly. Sandy was never known to turn his back on the foe.

With his curiosity aroused to a most intense pitch, the correspondent, therefore, advances to the fray. He casts a keen glance at the face of Mynheer Joe, but that worthy shows little of the emotions that may be deeply hidden under the calm exterior.

Thus Sandy draws up alongside of his friend and awaits the communication that is to decide a momentous epoch in their lives; nor is it long in forthcoming.

"Well, the baron has been at work, Sandy," remarks Joe, with a peculiar smile. "I know he would not be long in Bombay without attempting some manner of evil against us, particularly myself, for whom he entertains no great love, you understand."

Sandy nods his head in that vigorous, thoughtful way of his, more eloquent than words.

[To be Continued.]

Guide (referring to Egyptian Pyramids)—"It took hundreds of years to build them." O'Brien (the wealthy contractor)—"Thin it was a Government job—eh?"—Tit-Bits.

One Millionaire's.

"He's a millionaire, that boy is." The boy I was walking with looked across the way at the lad of whom my words were spoken. There was certainly nothing about the latter to suggest his wealth.

"You don't say so! It can't really be so, he looks almost shabby." "No matter for that, I live in the same block, and I know. But I did not say that was worth a million of money."

"Oh!" The boy who was listening looked rather disappointed. Still, he was anxious to know what the other one might have, anyhow, so he asked, "What, then?"

"He is what is called a 'millionaire of cheerfulness.' He is merry and bright the whole day long, not alone when it is sweetest and light, but when it isn't. He has such pluck and spirit, and such unflinching good nature, that he must have a million to draw upon, though he pays no taxes upon his capital. You never see him scowling or hear him whining. So he scatters his fortune all about and is a blessing to the neighborhood. I wish there were more millionaires of cheerfulness. There might be, if everybody gathered up all the sunshine to be had and gave it out as royally as Rob, who goes whistling yonder."

Then I went on, leaving Dick to wonder whether he were as rich as Rob, and if not, why not.

Deer Killed by Wire Fence.

A young moose crossed the yard of A. Putnam at Fort Fairfield, Me., and went in the direction of the railroad station. In its path it encountered a wire fence which it attempted to leap over, but caught its head in the wire and broke its neck.

The Farm.

Plants confined within doors are very liable to become infested with insects and their eggs. Fumigation with tobacco smoke will clean plants of all aphides and other insects, but has no effect on their eggs. To fumigate a plant or plants, confine them in a box, under a barrel or in some other way; put a pan of coals with some tobacco leaves on the coals in with the plant, not too near, or the plant will get too hot; give a good smoke. This will destroy all living insects. In two or three days give another and you will be rid of insects for some weeks.

Shade For the Swine.

Shade for swine is quite as necessary as for other animals, and when one has a tree or two in the pasture the question of shade is readily settled. If there are no trees plant three or four, and while they are growing use portable houses for shade, making them with a sill set on runners and with a ring set in the front all so that a horse may be attached and the house moved when necessary. These houses may be made of any cheap material, and the roof arranged so that a portion of it may consist of tree limbs laid over boards set far apart. The cost need not be great and the results will pay for the time and labor spent.

Cotton-Seed Meal For Cows.

Dairymen find it difficult to carry the cows along properly during the drouthy days of summer on pasture alone, and all proper grains have been tried with varying results. One of the best summer grains is cottonseed meal, for while feeding it will not materially increase the milk flow, it will keep it nearly to the standard and will keep up its quality, which is quite as important. The feeding of it also makes better butter at all times, and particularly during the summer. While the quantity fed varies according to circumstances, from two to four pounds per cow daily is about a fair ration and will give results which will warrant the expense at any season.

To Preserve Fence Posts.

In some sections of the country the division of fields by fences is something no longer done, but the majority of farmers still feel that they should divide their fields. The work involved in fence building is so great that one does not care to do it very often, hence it will pay to go to some trouble to preserve the posts, these being the parts of the fence which need renewing first.

While there are many preservatives recommended, all of them doubtless more or less valuable, the old plan of smearing the end of the post with gas tar is about as good as any. Of late years a strong solution of copper sulphate has been used for this purpose with considerable success. It takes time and trouble to prepare the fence posts with either preservative, but on as it should be, but it pays to do it, for the posts will last double the number of years.

Rye or Turnips After Corn.

I have been sowing rye now for two years. I sow it in the cornfield in September as soon as I can get the corn on shock, cultivate, then follow with the grain drill, putting on about two bushels of rye to the acre. Last summer I sowed cow-horn turnips in the corn at last working in July. They made a good growth. Sowed rye alongside of the turnips in October. We hauled our manure out on the turnips and rye last winter. The year before what land I had sowed in rye we manured in the winter. It grew nicely in the spring. We pastured it some, then plowed it down for corn again. It being a cold and wet summer the corn was not a large crop. We had a heavy hailstorm a few days before it came out in tassel, which put it back. I did not use any fertilizer when sowing the rye, although I believe it would make a stronger growth in the fall. We plowed it under, what stock did not eat, the last week in April and first of May for corn.—John F. Zook, in the Massachusetts Ploughman.

Shallow and Deep Plowing.

It seems almost needless to urge shallow cultivation for the "laying by" of the corn crop, yet there are some who still insist upon deep cultivation and ridging for the last time going over corn. The folly of such procedure, however, is very evident to any thinking, well posted man. The first cultivation should be deep to stir the subsoil and make room for the roots of the young plants. The second and possibly the third cultivations may be fairly deep, though not so deep as the first. The last two, it is a settled fact by experiment throughout the corn belt, should be shallow, not more than two and a half to three inches deep. And at this time the ground must be left as level as possible after each cultivation. The object is to mulch for the preservation of moisture, and why any thinking farmer should ridge up his corn, breaking the root and exposing a third to a half more surface to the sun, is a question yet to be solved. Though the statement that "corn will take care of itself after being laid by" is in a measure true, a constant watch must be kept to break the crust forming after any heavy rain to keep the weeds from seeding and to keep the fences in good repair, preventing damage by cattle. This in order to have a good crop at the harvest.—Rural World.

Early Plowing For Wheat.

While all wheat growers recognize the necessity for late sowing of wheat to avoid, as far as possible, the ravages of theessian fly, all do not see the necessity for early preparation of the soil. It is generally believed that much of the loss from winter freezing might be avoided by the early plowing of the ground for winter wheat.

Early preparation of the seed bed is easier than late plowing; it gives one a chance to get rid of the weeds more effectively, the seed bed may have one or more extra harrowings or rollings and, altogether, put in much better condition than when the plowing is done late. Then, too, should the ground be not in the best condition at seeding time the thorough preparation previous will count for a

great deal, enabling one to catch the ground for the final harrowing and rolling whenever it chances to be right for such working.

The question of varieties should also receive more consideration than it does and an excellent way to look up the best wheat fields in your county on similar soil and ascertain what varieties are grown. In addition to this every wheat grower, large or small, should have a test ground for new sorts. It will pay for its cost in giving one accurate knowledge of sorts on their own grounds.

Poultry and Women.

Each year sees many women added to the ranks of those who raise poultry for market and there is little doubt but that the industry offers many opportunities for women who have the necessary ground and the determination to gain their experience slowly. The writer recently spent a week with a friend at a popular summer resort along the sea coast of New Jersey and profoundly wished he had his poultry with him. Chickens of the size for roasters sold for 35 cents a pound in the markets, while guaranteed fresh eggs were in demand beyond the supply at 40 cents a dozen. While these prices are exceptional there is no doubt but that there is a profitable demand for both eggs and poultry in nearly every section of the country.

Women can bring to the work of poultry raising that care for the small details so necessary to success in the work and a characteristic lacking in the majority of men. It is a well-known fact, and every honest farmer will admit it, that two hens set at the same time, one by a man and the other by a woman, will show a decided difference in the number of chicks hatched, and it will always be in favor of the hen set and cared for by the woman. The man forgets to give the hen water or food or some other attention she needs during the period of incubation. Women with a rural training should do some close studying of the poultry business this summer and make a start in the winter or next spring.

The Rhode Island Red.

A pair of these useful, all-purpose fowls is shown here, and their general appearance gives us some idea of their prominent characteristics. They are full-breasted and stockily built, and at all ages, from the broiler to the roaster, produce a generous amount of the choicest flesh.

They are medium size, being about the same as the Plymouth Rock; in fact, they have been used extensively in crosses to produce the Buff Rocks and Wyandottes. They originated in Rhode Island, from whence they take their name, and are found there on almost every farm.

They are good layers and splendid mothers, and when they have become better known, will be among our most popular new breeds.

Drive slowly the first hour after a meal. Light and dryness destroy fungus growths. Thorough grooming cleanses the hide as well as the hair. Sores or bruises on horses should be healed up as soon as possible. It is always ruinous to dispose of any branch farming when prices are unsatisfactory. Generally the smaller the farm the better the cultivation and the greater the profit for the expenditure. The dirt and sweat which accumulate on the horses during the day should never be allowed to remain on overnight. Plants have greater need for their leaves and can be more easily killed in the growing season than when partially dormant. If the cow has to travel over a large surface and take a good deal of time to fill her stomach, the time and energy expended will cause a reduction in the flow of milk. As the leaves of the tulip and other spring flowering bulbs ripen and die, the best practice is to take them up, and, after drying them in the shade for a few days, put them in a paper sack and put them away until in the fall. The dairy cow should not be obliged to travel a long distance for water. If she does she will go without until she gets very thirsty and feverish, and then drink until she is painfully uncomfortable. Both conditions are unfavorable for milk secretion. As a rule wounds made by pruning in September or a little earlier somewhat, although they do not heal quickly, never decay. The wood, owing, however, to its condition of ripeness, becomes hard as bone, and although the healing process may proceed slowly, the tree does not seem to suffer in any way. The iron mines of Michigan give employment to 14,455 persons, and their products amount to \$20,695,860.

ARTICULAR PAINTS.

SELECTING FRUIT TREES.

Only experienced people are capable of selecting varieties of fruit trees. Novices should always seek advice. The soil, climate and demand of the market are to be considered. Varieties that may be suitable for one locality may be almost worthless in another; and it is the lack of knowledge in selecting varieties that causes some failure. Selection is a very important matter, for when a tree is planted and the grower waits several years for his crop it is then too late to rectify mistakes except at a great loss.

WHY NOT HAVE MORE APPLES?

Adapted to more than two-thirds of the farms of this country, going North, South, East and West, there are to be found many farms where it is a minus quantity. No other fruit known to the American farmer can equal the apple as a food product. Other fruit is considered a luxury, the apple a staple product. It is practically a twelve-month fruit, as the average farmer can have apples by a judicious selection of varieties and care of the fruit, until the new crop comes in. For culinary purposes it is unexcelled; capable of such a variety of uses as it is, it does not so easily tire of it, and in some form it may be used as a dessert the year around. In the form of preserves and jelly it fills an important place; dried and evaporated apples add still further to the variety. The first cost of an orchard is small, the running expenses insignificant and the portion of the farmer's time required short; in fact, it is an easy working side line. One hundred apple trees may be had for \$10; better ones, though at \$12 and \$15. Novelties cost more, but why fool with novelties, except in a small way, when there is such good fruit in the more certain standard sorts. The first aim of the farmer should be to provide fruit in quantity for his own use, but he need not have any anxiety about the surplus, especially of winter apples, if he lives out of a regular apple shipping section. Winter apples have sold for \$1 to \$1.50 per bushel for many seasons off the home market.—Fruit, in The Epitomist.

THE FRUIT VS. FRUITLESS FARM.

In point of economy the farmer who raises his own fruit has everything his own way over the one who does not, for the cost of production is very small, while the outlay or first cost is insignificant. The raising of a family supply of fruit interferes very little with other farm work and the growing of fruit for market as a side line is very profitable, for while the cost of production is small, the fruit comes high very often to those who have to buy; hence, this advantage of the fruit farm. Aside from saving, there is a great advantage in having fruit fresh and crisp from the tree or vine, which the farmer of the fruitless farm cannot enjoy. How much more pleasing and appetizing is fresh whole fruit than that which is wilted and mashed with little of the original flavor left! The table of the man who grows his own fruit is well provided with fruit of a quality which the less provident cannot have. The man who raises his own fruit uses it more lavishly than the one who has everything to buy; hence, the better living and the more advantage of the medicinal value of fruit. The orchard, too, is a drawing card to the majority of home seekers; consequently, the farm is more valuable and often quicker sold when it has an interesting fruit supply on it. Some kind of fruit is adapted to nearly every section of the country. If the peach, pear or plum is not adapted, the apple is, very likely, and by a succession can be made to take the place of other fruit.—E. W. Jones, in The Epitomist.

PROPAGATING CURRANTS.

The usual methods of propagating currants is to make cuttings of the new wood in the fall or early winter and keep them in a trench or in the soil for planting in the early spring. The majority of such cuttings will strike root and grow. A much better way, however, to my mind, and one which will give the gardener a start over the above method of half a season's growth, and one by which not a cutting will not be lost, is to make cuttings along the last of August or early in the fall, and plant them immediately in well drained soil in nursery rows. The trench method is the simplest, and a good planting at time of planting will insure rooting. In case of a drought following, which is not likely, three or four buckets of water, run down a hoe furrow alongside the slips will irrigate fifty plants. During the following six weeks the cuttings will strike out vigorous roots, and the following spring, instead of being "cuttings," they will be sturdy plants ready to leaf out and take full advantage of the earliest spring sunshine and warmth. My first practical experiment with August current cuttings was the striking in the ground and tramping tight of a shoot accidentally knocked off the parent bush. The ground was dry and I never expected the slip to live. It died, apparently, after a few days, but when I happened to notice it ten days later it had branched up strong and healthy, and when I pulled it up in October to observe its progress it had a fine long root system.—Guy E. Mitchell, in The Cultivator.

The Sea Level.

Professor Tait comes forward with the statement that with the slight amount of compression known to be possible in water the sea would be 116 feet higher in level if it were not for the compression due to its own weight. Supposing this fact to be true, the compressibility of water adds about 2,000,000 more square miles to the land surface of the earth.

Labor troubles on the Lakes has seriously affected the grain receipts of Buffalo.

GOOD ROADS.

I is subject for frequent comment on the part of travelers that the roads of Europe are far superior to those of the United States; and this result is generally attributed to the system of government aid and supervision which prevails in nearly all European nations. But it is not so generally known that our nearest neighbor, Canada, is also ahead of us, not only in the character of the roads, but in the matter of road legislation.

Hon. A. W. Campbell, Highway Commissioner of Ontario, is an enthusiast on the subject of good roads, and at the same time a very able and practical public official. He is quite well known to the good roads people of the United States, as he has attended and addressed a number of important conventions in this country. In a recent report he says:

"Good roads are essential to the full development of agriculture. In a country such as Ontario, dependent upon agriculture, this means that good roads are of very great importance to the towns and cities as well. Good roads are not a benefit to any one class of the community. They are of universal value. This is a matter of which too narrow a view has been taken in Ontario. If we must have canals and railroads, then we must have good country roads. It has been taken for granted that if the country as a whole constructed canals and subsidized railroads, the common roads could take care of themselves. But this has not been the case.

"The broader aspect of the question has recently been given prominence by the decision of the Provincial Government to appropriate \$1,000,000 for road improvement. This, for lack of a better name, has been termed government 'aid' or 'assistance.' It is a recognition of the value of good roads to every citizen of the country, and a just effort on the part of the Government to co-operate in procuring them.

"The object of the present measure is not so much to aid by the gratuitous distribution of money, but has for its aim a nobler purpose. While it aims to encourage the doing of a work which is acknowledged by all as being an important and necessary service, its prime object is to equalize and lighten the cost. The unfairness and injustice of the present system of taxation for highway construction is so noticeable as to be a matter of wonderment that some step of this kind has not been ere this devised by Government, or compelled by the people.

"The Government is only exercising its rightful function as a part of the administrative system in providing a portion of the cost of making roads and distributing the money among the different municipalities entitled to it. This function can be performed by the Provincial Government only."

In Nova Scotia, nearly fifteen years ago, the Provincial Government began the appropriation of funds to improve the roads and the plan has proved entirely successful where the old system of depending on the local communities was a complete failure.

Even away out in British Columbia there are many fine roads which are said to be "the delight of tourists." All these are built and kept up by the Government.

Road Maintenance.

Without proper care the most expensive road may go to ruin in two or three years, and the initial expense of constructing it be nearly lost. It is of greatest importance, therefore, that all good roads should have daily care. They not only wear out, but wash out and freeze out. Water is the greatest road destroyer.

It is necessary to the proper maintenance of a road that it should "crown" or be higher in the middle than at the sides. If it is flat in the centre it soon becomes concave, and its middle soon becomes a pool or a mudhole if on a level, or a water course if on an incline.

A hollow, rut, or puddle should never be allowed to remain, but should be evenly filled and tamped with the same material of which the surface was originally constructed. A rake should be used freely, especially in removing stones, lumps, or ridges. Ruts may be avoided by using wide tires on all wagons which carry heavy loads. If this is not always possible, the horses should be hitched so that they will walk directly in front of the wheels. This can be accomplished by making the double, or whiffle, tree of such length that the ends may be in line with the wagon wheels. A horse will not walk in a rut unless compelled to do so, and, consequently, if all horses were hitched in this way ruts would eventually disappear from stone roads.

If stones are cracked on a road with a hammer a smooth surface is out of the question. Use stone chips for repairing stone roads, and remember that all foreign material and rubbish will ruin the best road, and that dust and mud will double the cost of maintenance.

Ordinarily the chief work done by country people on highways is repairing the damage resulting from neglect. Why this negligence? The adage, "A stitch in time saves nine," can never be applied more appropriately to anything than to the maintenance or repair of all kinds of roads.

Will Never Turn Back.

The people of this country will never turn back until every section and neighborhood enjoys the blessings of rural free mail delivery. But before this can be accomplished, a general improvement of the roads is absolutely necessary. There is no escaping this conclusion. Already bad roads are proving the main obstacle to the establishment and maintenance of rural mail routes. If this is true now, while the system is extending over those areas which have the best roads, how much more true will it be when we attempt to make the system universal.