

The Special Correspondent

CHAPTER XII.

In 1870 the Russians endeavored, without success, to establish a fair at Tashkend, which would rival that of Nijni-Novgorod. Some twenty years later the attempt would have succeeded, and as a matter of fact the fair now exists, owing to the making of the Transcaspian to unite Samarkand and Tashkend. We left Tashkend at precisely 11 o'clock in the morning.

As soon as we are on the move I begin to think of Kinko. His little love romance has touched me to the heart: this sweetheart who sent himself off to pay the expenses. I am sure Major Noltitz would be interested in these two turtle doves, one of which is in a cage; he would not be too hard on this defrauder of the company, he would be incapable of betraying him. Consequently I have a great desire to tell him of my expedition into the baggage van. But the secret is not mine. I must do nothing that might get Kinko into trouble.

And so I am silent, and to-night I will, if possible, take a few provisions to my packing case—to my snail in his shell, let us say. And is not the young Rumanian like a snail in his shell, for it is as much as he can do to get out of it?

We reach Khodjend about three in the afternoon. The country is fertile, green, carefully cultivated. It is a succession of kitchen gardens, which seem to be well kept, immense fields sown with clover, which yield four or five crops a year. The roads near the town are bordered with long rows of mulberry trees, which diversify the view with eccentric branches.

Beyond Kokhan we shall run due east, and by Marghehan and Oeh pass through the gorges of the Pamirs, so as to reach the Turkesto-Chinese frontier.

The train had only just started when the travelers took their seats at the table, where I failed to notice any fresh arrival.

Ephriniel is in his usual place. Without going as far as familiarity, it is obvious that a close intimacy, founded on a similarity in tastes and aptitudes, exists between Miss Horatia Bluet and the Yankee. There is no doubt, in our opinion, but what it will end in a wedding as soon as the train arrives. Both will have their romance of the rail.

Frankly, I like that of Kinko and Zinea Klorck much better. It is true, the pretty Rumanian is not here.

The dinner lasted till rather late, and terminated in an unexpected manner by an offer from Caterna to recite a monologue.

Our train more and more resembled a small rolling town. It had even its casino, this dining car in which we were gathered at the moment. And it was thus in the eastern part of Turkestan, four hundred kilometers from the Pamir plateau, at dessert, after our excellent dinner served in a saloon of the Grand Transasiatic, that the "Obsession" was given with remarkable talent by Monsieur Caterna, grand premier comique, engaged at the Shanghai theater for the approaching season.

"Monsieur," said Pan Chao, "my sincere compliments. I have heard young Coquelle—"

"A master, monsieur; a master!" said Caterna.

"Whom you approach—"

"Respectfully—very respectfully!"

The bravos lavished on Caterna had no effect on Sir Francis Trevelyan, who had been occupying himself with enomatic exclamations regarding the dinner, which he considered execrable. He was not amused. And yet nobody took any notice of this grumbling gentleman's recriminations.

Baron Weisschnitzerdorfer had not understood a single word of this little masterpiece, and had he understood it, he would not have been able to appreciate this sample of Parisian monologomania.

As to my lord Faruskiar and his inseparable Ghangir, it seemed that, in spite of their traditional reserve, the surprising grimaces, the significant gestures, the comical intonations, had interested them to a certain extent.

The actor had noticed it, and appreciated this silent admiration. As he rose from the table he said to me:

"He is magnificent, this signeur. What dignity! What a presence! What a type of the furthest east! I like his companion less—a third-rate fellow at the outside."

During dinner the train had passed Kastakos Station, situated in the center of a mountainous region. The road curved a good deal, and ran over viaducts and through tunnels, as we could tell by the noise.

We enter Kokhan Station at 9 o'clock in the evening. The stoppage is to last two hours. We get out on to the platform. As we are leaving the car I am near Major Noltitz, who asks young Pan Chao:

"Have you ever heard of this mandarin Yen Lou, whose body is being taken to Peking?"

"Never, Major."

"But he ought to be a personage of consideration, to be treated with the honor he gets."

"That is possible," said Pan Chao; "but we have so many personages of consideration in the Celestial Empire."

"And so this mandarin Yen Lou?"

"I never heard him mentioned."

Why did Major Noltitz ask the Chinaman this question? What was he thinking about?

CHAPTER XIII.

Kokhan, two hours to stop. It is night. The majority of the travelers have already taken up their sleeping quarters in the car, and do not care to alight.

Here am I on the platform. This is rather an important station, and from the engine house comes a more powerful locomotive than those which have brought the train along since we left Uzun Ada. These early engines were all very well as long as the line lay over an almost horizontal plain, but now we are among the gorges of the Pamir plateau, there are gradients of such steepness as to require more engine power.

I watch the proceedings, and when the locomotive has been detached with its tender, the baggage van—with Kinko in it—is at the head of the train.

The idea occurs to me that the young Rumanian may perhaps venture out on the platform. It would be an imprudence, for he runs the risk of being seen by the police, who move about taking a good look at the passengers. What my No. 11 had better do is to remain in his box, or, at least, in his van. I will go and get a few provisions, liquid and solid, and take them to him, even before the departure of the train, if it is possible to do so without fear of being noticed.

The refreshment room at the station is open, and Popof is not there. If he was to see me making purchases he would be astonished, as the dining car contains everything we might want.

At the bar I get a little cold meat and some bread. The station is not well lighted. A few lamps give only a feeble light. Popof is busy with one of the railway men. The new engine has not yet been attached to the train. The moment seems favorable. It is useless to wait until we have left Kokhan. If I can reach Kinko I shall be able to sleep through the night—and that will be welcome, I admit.

I step on to the train, and after assuring myself that no one is watching me, I enter the baggage van, saying as I do so:

"It is I."

In fact, it is as well to warn Kinko in case he is out of his box. But he had not thought of getting out, and I advise him to be very careful. He is very pleased at the provisions, for they are a change to his usual diet.

"I do not know how to thank you, Monsieur Bombarnac," he says to me. "When shall we be at the frontier?"

"To-morrow, about one in the afternoon."

"And at Gachgar?"

"Fifteen hours afterward, on the night of the nineteenth."

"There the danger is, Monsieur Bombarnac."

"Yes, Kinko; for if it is difficult to enter the Russian possessions, it is no less difficult to get out of them, when the Chinese are at the gates. Their officials will give us a good look over before they will let us pass. At the same time they examine the passengers much more closely than they do their baggage. And as this van is reserved for the luggage going through to Peking, I do not think you have much to fear. So, good night. As a matter of precaution, I would rather not prolong my visit."

I have come out; I have regained my couch, and I really did not hear the starting signal when the train began to move.

The only station of any importance which the railway passed before sunrise was that of Marghehan, where the stoppage was a short one.

Beyond this station the road reaches the frontier which divides Russian Turkestan from the Pamir plateau and the vast territory of the Kara-Khizgies.

This part of Central Asia is continually being troubled by plutonian disturbances beneath its surface. Northern Turkestan has frequently suffered from earthquake—the terrible experience of 1887 will not have been forgotten—and at Tashkend, as at Samarkand, I saw the traces of these commotions. In fact, minor oscillations are continually being observed, and this volcanic action takes place all along the coast, where lay the shores of a petroleum and naphtha, from the Caspian Sea to the Pamir plateau. In short, this region is one of the most interesting parts of Central Asia that a tourist can visit.

CHAPTER XIV.

The Pamir, or Bam-i-Dounlah, is commonly called the "Roof of the World." From it radiate the mighty chains of the T'ian Shan, of the Kuen Lun, of the Kara Korum, of the Himalaya, of the Hindoo Koosh. This orographic system, four hundred kilometers across, which remained for so many years an impassable barrier, has been surmounted by Russian tenacity. The Slav race and the yellow race have come into contact.

The travelers of the Aryan people have all attempted to explore the plateau of the Pamir. Without going back to Marco Polo in the thirteenth century, what do we find? The English with Forsyth, Douglas, Biddulph, Youngusband, and the celebrated Gordon, who died on the Upper Nile; the Russians with Fendchenko, Skobeleff, Prjevalsky, Grambscheky, General Perittov, Prince Gallitzin, the brothers Groun-Grijmallo; the French with Auvregne, Vonvalat, Capus, Papin, Breteuil de Rhins, Joseph Martin, Grenard, Edouard Blanc; the Swedes with Doctor Sven Hedin.

This roof of the world, one would say, is lifted up in magic hand to let us see its mysteries. We know now that it consists of an inextricable entanglement of valleys, the mean altitude of which exceeds three thousand meters; we know that it is dominated by the peaks of Gourouudi and Kauffmann, twenty-two thousand feet high, and the peak of Tagarna, which is twenty-seven thousand feet; we know that it sends off to the west the Oxus and the Amou-Radia, and to the east the Farim; we know that it chiefly consists of primary rocks, in which are patches of schist and quartz, red sands of secondary age, and the clayey, sandy loess of the quaternary period which is so abundant in Central Asia.

The difficulties the Grand Transasiatic had in crossing this plateau were extraordinary. It was a challenge from the genius of man to nature, and the victory remained with genius. Through the gently sloping passes which the Kirghizes call "beis," viaducts, bridges, embankments, cuttings, tunnels had to be made to carry the line. Here are sharp curves, gradients, which require the most powerful locomotives, here and there stationary engines to haul up the train with cables; in a word, a Herculean labor, superior to the works of the American engineers in the defiles of the Sierra Nevada and the Rocky mountains.

The desolate aspect of these territories makes a deep impression on the imagination. As the train gains the higher altitudes this impression is all the more vivid. There are no towns, no villages—nothing but a few scattered huts, in which the Pamirian lives a solitary existence with his family, his herds of yaks or "koutas," which are cattle with horses' tails, his diminutive sheep, his thick-haired goats. The molting of these animals, if we may so phrase it, is a natural consequence of the climate, and they change the dressing gown of winter for the white fur coat of summer. It is the same with the dog, whose coat becomes whiter in the hot season.

As the passes are ascended, wide breaks in the ranges yield frequent glimpses of the more distant portions of the plateau. In many places are clumps of birches and junipers, which are the principal trees of the Pamir, and on the undulating plains grow tamarisks and sedges and mugwort, and a sort of reed very abundant by the sides of the saline pools, and a dwarf labiate called "terkenne" by the Kirghizes.

The major mentioned certain animals which constitute a somewhat varied fauna on the heights of the Pamir. It is even necessary to keep an eye on the platforms of the cars in case a stray panther or bear might seek a ride without any right to travel either first or second class. During the day our companions were on the lookout from both ends of the cars. What shouts arose when panthers or felines capered along the line with intentions that certainly seemed suspicious! A few revolver shots were discharged, without much necessity perhaps, but they amused as well as reassured the travelers. In the afternoon we were witnesses of a magnificent shot, which killed instantly an enormous panther just as he was landing on the side step of the third carriage.

It was our superb Mongol to whom we were indebted for this marksman's masterpiece.

"What a hand and what an eye!" said I to the major, who continued to look on Faruskiar with suspicion.

Among the other animals of the Pamirian fauna appeared wolves and foxes, and flocks of those large wild sheep with gnarled and gracefully curved horns, which are known to the natives as arkars. High in the sky flew the vultures, bearded and unbarbed, and amid the clouds of white vapor we left behind us were many crows and pigeons and turtle doves and wagtails.

The day passed without adventure. At 6 o'clock in the evening we crossed the frontier, after a run of nearly two thousand three hundred kilometers, accomplished in four days since leaving Uzun Ada. Two hundred and fifty kilometers beyond we shall be at Kachgar. Although we are now in Chinese Turkestan, it will not be till we reach that town that we shall have our first experience of Chinese administration.

Dinner over about nine o'clock, we stretched ourselves on our beds, in the hope, or rather the conviction, that the night will be as calm as the preceding one.

It was not to be so. At first the train was running down the slopes of the Pamir at great speed. Then it resumed its normal rate along the level.

It was about one in the morning when I was suddenly awakened. At the same time Major Noltitz and most of our companions jumped up. There were loud shouts in the rear of the train. What had happened?

Anxiety seized upon the travelers—that confused, unreasonable anxiety caused by the slightest incident on a railroad.

"What is the matter? What is the matter?"

These words were uttered in alarm from all sides, and in different languages. My first thought was that we were attacked. I thought of the famous Ki-Tsang, the Mongol pirate. In a moment the train began to slow, evidently preparing to stop. Popof came into the van, and I asked him what had happened.

"An accident," he replied. "A coupling has broken, and the two last vans are left behind."

English Epigrams to Date.

Queen Victoria transformed Great Britain into a crowned republic, a nation in which the will of the people is the supreme law.—Andrew Carnegie.

Great poetry is the surest antidote to the prevailing virus of materialism.—Alfred Austin, the Poet Laureate.

The educational system of this country is chaotic and utterly behind the age.—Prime Minister Balfour.

In dealing with education the first thing is to consider the children; the churches come afterward.—Austen Chamberlain.

We want sometimes in this country a little more of the spirit of tolerance.—Earl Spencer.

This is above all a reading age, but how many people read the Bible?—The Bishop of Manchester.

Plenty of porridge and milk will do more for the physique of a nation than the most up-to-date physical drill.—Professor Laurie of Edinburgh University.

We must dispel the blight of inquisitorial oppression which stunts, distorts and withers every branch of the national life of Ireland.—The Right Honorable George Wyndham, Chief Secretary for Ireland.

The bicycle nowadays is part of the necessary equipment of a lad.—County Court Judge Sir A. Marten.—New York Sun.

Better than Antifat.

Wiggins—Blowitz, the pugilist, lost 130 pounds of flesh while training for his last fight.

Snoozem—Get out! What are you trying to give me, anyway?

Wiggins—Straight goods. His wife eloped with one of his trainers.

Knew Where He Spoke.

"One-half the world," remarked the party with the quotation habit, "doesn't know how the other half lives."

"I guess that's right," rejoined the married man, "but the feminine half works overtime trying to find out."

Whose They Differ.

"Theory and practice are different things," said the professor.

"Yes, indeed," assented the medical student, "I pay for theory and intend to be paid for practice."

The worth of a state, in the long run, is the worth of the individuals composing it.—J. S. Mill.

IRRIGATION PRODUCES SWEETS.

Beet Sugar Making in the West Is a Very Interesting Process.

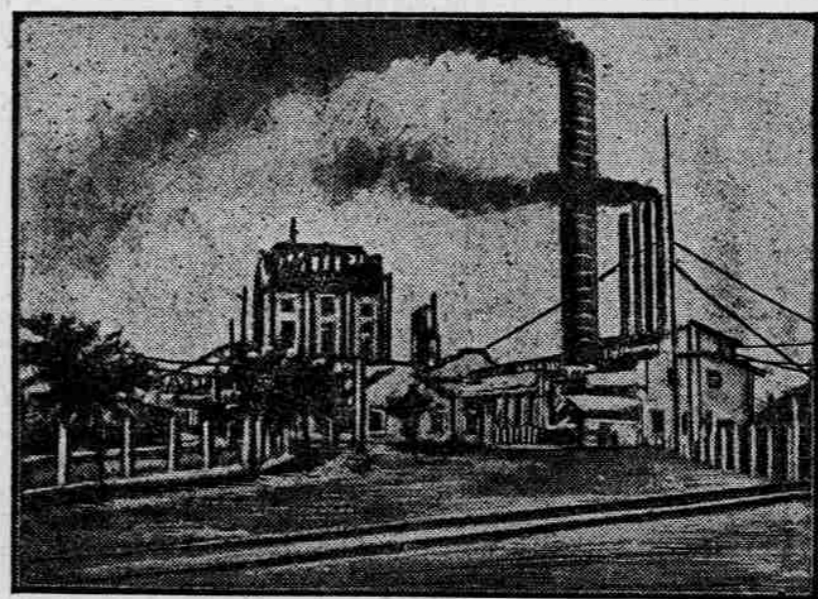
In some of the Western States, especially Wisconsin, Nebraska, Colorado, and the western part of Kansas, the growing of beets for sugar, has become a recognized industry. Large factories for the conversion of the beet into sugar have been erected, and here are employed large numbers of men during the fall and winter months.

Colorado leads in the production of beets. This can be accounted for by the same reason that she is noted for her cantaloupes; that is, irrigation and the large numbers of days of sunshine. The sun shines on fully 300 days of the year and the beet is stipulated to a wonderful growth.

In growing beets the ground is prepared in much the same way as for cantaloupes, a thorough breaking and pulverizing of the ground being necessary for best results. After leveling the ground, which makes irrigation easier, the beet drill is brought into use. This drill is on the order of an ordinary grain drill, with the exception that it only plants four rows 18 inches apart at a time, and has no attachments for drilling in fertilizer. On the drill are two small shovels, placed so that they make two furrows between the two rows on each side. These furrows carry the irrigating water, which soaks back and moistens the seed.

When through with the seeding, the water is turned into the furrows made by the drill, between each two rows. The water is kept running until the seed is thoroughly soaked, care being taken that the water does not overflow very much, as this causes the ground to bake, and the sprouts cannot force their way through the crust thus formed. When plants have obtained the height of one-half inch to an inch, the cultivator is brought into use.

This cultivator is drawn by one



THE ROCKY FORD BEET SUGAR FACTORY.

horse and cultivates two rows at a time. It is mounted on two wheels, each about 30 inches in diameter. Behind these wheels are two horizontal bars, connected by two other bars to the axle, on which they have a free up and down motion. There is also a pivot which allows a side motion, controlled with handles by the operator. With the cultivator are several sets of knives, shovels, etc., any of which can be fastened to the horizontal bars, the grower using whatever kind is adapted for the kind of cultivation he wishes.

When plants are a couple of inches high they are thinned out, leaving plants six to ten inches apart. This work is usually done by contract, the price paid averaging from \$6 to \$7 per acre.

In removing beets from the ground, a large plow or lifter is used. This plow has a depth of 18 inches or more, made necessary by the great depth to which the beet penetrates the soil. It is drawn by three or four horses, and raises the beet partly out of the ground, so that it can be picked up by the tapper.

The beets are taken by local freight to the factory, where they are dumped into long ditches, which have a stream of water flowing through them. These ditches, which are lined with cement, slope toward the factory building, near which they converge into one large one. The water in these ditches serve the double purpose of carrying and partially cleaning the beets. At the end of this large ditch, the beets are raised from the water by an elevating apparatus, which deposits them in a large washing machine. This consists of an immense spiral revolving in a round iron box, placed in a horizontal position, and with a stream of clear water flowing through it. The beets, rolling and tumbling, are pushed forward through this water, and coming out free from dirt, are deposited in a screw elevator and carried to the top of the factory. Here they find their way into an automatic weighing machine, then dumped into the slier where they are cut in small pieces.

On the next floor below the slicer is located the diffusion battery, which is composed of a number of iron tanks, placed in a group. The tanks are connected with each other by large pipes, and each tank is capable of holding three or four thousand pounds of the slices. The first tank is filled with slices, and has water turned into it. This is allowed to stand while the second tank is filling with slices. Then the valve connecting the first tank with the second is opened, and the water in the first tank, having absorbed some sugar from the slices, is forced into the second by fresh water being pumped into the first. This water passes from tank to tank absorbing a little more sugar from each tank, until it has gone through them

all. The first lot of water turned in takes out 50 per cent of the sugar, and the second lot takes 50 per cent of the remainder. This is repeated ten times, and in the end has exhausted all the sugar from the slices to within one-tenth of one per cent. The slices remaining after this process are dropped from the tanks and run through large presses, and the partly dried pulp is deposited in cars and wagons to be used for feeding cattle, it being a great milk and flesh producer.

The juice remaining is of a dark brown color, containing much organic matter not sugar. It is run into tall tanks holding a couple thousand gallons, and here the lime solution which takes out the organic matter, is added. It now goes through a series of boilings, filtering and clarifying processes, which leave the fluid a moderately thick syrup, ready to be boiled down to sugar. The syrup is pumped up into large round vacuum pans. Inside these pans are coiled large copper steam pipes, and a large air pump produces a high vacuum and removes the evaporated water so that the syrup boils very rapidly and at a very low temperature. This boiling mass is watched through glass windows in the sides of the pans, and when small grains begin to appear they are fed by adding fresh syrup until they reach the required size. When the size is right, and the water evaporated sufficiently, the steam is turned off, the pump stopped, and the mass is allowed to run into the tanks below, by opening a valve at the outlet in the bottom of the pan.

The syrup at this stage has the appearance of dark molasses, thickened with granulated sugar, and is so thick that it will barely run. This is put into the "centrifugals," large whirling drums having their sides perforated, and lined with gauze. As these machines whirl around, the sugar rises along the sides of the drum, and the



Maple-sugar-making is getting to be a restricted industry, and may, indeed, become a lost art. The Bureau of Forestry, which has recently made a study of the business, has brought some interesting facts to light. Since 1850 the area of maple-sugar-farming has greatly changed and shrunk. In early days maple-sugar was made even in the South, because cane-sugar was scarce and expensive. In New England, New York and a few other States the industry has held its own or been extended. The bureau finds that seven-eighths of what is sold as maple-sugar or maple-syrup is spurious; but in most cases the adulteration is the work of middlemen, not of the producers. The net income of a maple-sugar grove is conservatively estimated at \$3 an acre; and since the work can be done at a time when there is little other farm employment, and the grove will also furnish the family firewood without deterioration, a sugar-orchard is a fairly profitable investment.

Greater secrecy than ever before will be exercised this year concerning the scores made at target practice by the various vessels of the Atlantic fleet. While some of the details of the results may be made public, it is not the intention of the Navy Department to give out the scores. This government has never been able to gather information concerning the target practices of other navies and there seems to be no reason why the scores of our navy should be made public. Great Britain carefully guards all of the scores made by her warships. Some years ago an officer of a British vessel on the Asiatic station told of the results of the target practice then just finished. The information reached this country and was published. A thorough investigation was made and the officer would have been court-martialed if it had been possible to produce positive proof against him.

The expenditures of the government exceeded its current income by more than \$9,000,000 in April, and the treasury deficit for the first ten months of the fiscal year is upward of \$34,000,000. While the months of May and June nearly always show a balance on the right side of the government's account books, many fear that the deficit at the end of the fiscal year, June 30, will reach \$30,000,000. The problem of the deficit is a serious one in the opinion of the treasury officials. The cash balance in the treasury has declined to \$133,181,777, including the amounts held by the national bank depositors, and Secretary Shaw has found it necessary to withdraw from the banks \$20,000,000. The cash balance actually on hand in the treasury is said by some to have fallen below the point of absolute safety.

"Beware of the high rate of interest," is the lesson of most of the swindles against which the Post Office Department has recently issued fraud orders. An offer of exceptionally large returns for either labor or capital should at once awaken suspicion. If the enterprise is so promising, why does not the person who controls it keep it for himself? The fact that there are a few, a very few, cases where large risks have been taken and large profits have been realized is the argument most used by those who have patent rights, gold mines and other such properties to sell at a thousand times their value. The person of moderate means cannot afford to take such risks.

In 1904 the number of arrivals at Ellis Island was 606,000, the number in the entire country being 800,000. Of these 268,510 settled down in New York City, and the great majority of the remainder went to other cities as laborers, etc., where they are not needed. It is now estimated that one million immigrants will come to this country during the year 1905. The task of absorbing this great mass into the political system is one of the penalties which the United States pays for its unrivaled economic opportunities, its relief from great standing armies, and its atmosphere of freedom.

During the last year more than five thousand rural mail routes have been established, and during the coming summer a thousand more will be opened. Every route over which the carrier takes his little packet is a thread which binds this great, spreading country into more solid unity.

Expansion seems still to be the national watchword. The general staff of the army has decided to lengthen the United States bayonet by four inches. Still, it was a dictum of Oliver Wendell Holmes that as nations lengthen their weapons they narrow their boundaries.

Labor Notes.

The teaching of typewriting will be begun in the normal school at Zacatecas, Mexico. The government of the State has bought a number of machines of the most modern and best types for the school.

Chicago and Alton employes have been instructed not only to give up drinking intoxicating liquors, but to stay away from gambling places and dance halls. The company says it means to keep its men up to as high a physical and mental standard as possible.

Some men's ideas of reciprocity are rather one-sided.