

ROYAL RANGER RALPH;

The Wail of the Western Prairies.

BY WELDON J. COBB.

CHAPTER V.—Continued.

"I am glad the poor animal has escaped," breath-d Inez. "It means danger to us."

"Yes, Despard will see the horse and think we are here."

"We dare not return to the main canyon, and we will be found if he and his men come this way."

"What shall we do?" Darrel surveyed their situation critically.

"It is Despard and his men." "Probably, we will go farther down the stream. Food there seems to be some kind of a cave yonder."

A few minutes later they reached a large cavern-like aperture in the rocks. Here they stood silently for some minutes, watching the stream and the quicksand beyond and awaiting developments.

Inez bent over him with anxious, solicitous eyes.

"Not seriously injured?" she asked, in a tremulous tone. "No, only a few trifling bruises."

"Within half an hour Darrel was fully recuperated. "We will try to leave the valley," he said.

"By the way we came?" inquired Inez. "No, I fear our enemies might be in the vicinity of the canyon."

"But there seems to be no outlet this way." "Then we will remain here until night."

"It was late in the afternoon when they gained a narrow gulch which they found led into the main canyon."

"Two hours later, just at dusk, after traveling cautiously for some miles, they came out on a plateau. A mile beyond them the lights of a village showed plainly."

"Mines' Gulch, at last!" remarked Darrel. They descended toward the settlement, but passed as at the edge of an intervening thicket they heard human voices in the distance.

"Remain here for a few minutes," spoke Darrel. "It may be our enemies' darkest and densest foliage."

Heaven, his neck and body in pain from a fevered, his head the weary Dyke. Despard had driven him. Several times its effects had been felt by his couch and it was only by the merest accident that, in a moment of temporary recuperation, he had wandered to the scene of the hang-

"Thus it was that, in less than an hour after the capture of Inez Tracey by the bandits, Darrel Grey awoke to find himself an inmate of Banzer Ralph's cabin."

"His senses were bewildered, his brow fevered, his neck and body in pain from a fevered, his head the weary Dyke. Despard had driven him. Several times its effects had been felt by his couch and it was only by the merest accident that, in a moment of temporary recuperation, he had wandered to the scene of the hang-

"The man I saw at the depot?" "The same?" "Who told me about the train wreck?"

"Yes, stranger; Banzer Ralph, that's me, and lucky for you I stroiled down to the tavern a little while ago."

"Darrel's voice, involuntarily to his neck and he shuddered. "They tried to hang me," he said hoarsely.

"Yes, and almost succeeded." "And you saved me?" "And you saved me, lad. There you're getting back your color already. It was all a miserable mistake."

"The lynching?" "Yes. The people are so excited over the train robbery that they act impulsively."

"They beat off the robbers and killed two of the outlaws. They pursued the others to the north, and the vigilantes are all about them now."

BILLIONS OF STAMPS.

UNCLE SAM PRINTS AN ENORMOUS NUMBER EACH YEAR.

All Kinds and Colors, From the Pink Two-Center to the Lovely One Hundred-Dollar Stamp—How They Are Turned Out by the Washington Bureau.

Uncle Sam makes and issues in the course of a year postage and other stamps to the number of more than four billions. The exact number for the last year of which record is obtainable, says the New York World, is 4,213,280,261.

A better idea, probably, can be obtained of the size of the stamp output for a year by the statement that if they were pasted together, end for end, the strip thus obtained would encircle the earth seven times around at the equator.

There were all sorts and conditions of stamps in this aggregate of four billions. There were postage stamps, from the humble little one-center and the familiar pink two-center that every one sees to the lovely one hundred-dollar stamp that lives an exclusive life and never shows itself to the vulgar herd.

The everyday two-cent stamp, with its cheerful pink color and mulligins as a back, was printed to the number of a little more than two billions. If the magnitude of this number is difficult to grasp, it is easy enough to measure a two-cent stamp and figure for one's self how many thousand miles those

two billions would stretch if pasted end to end. All of the stamps used by the United States are printed at Washington in the Bureau of Engraving and Printing, the name institution that turns out the paper money of the Government. Formerly they were made by the bank note companies in New York, but in 1893 Uncle Sam concluded that as he was going into the printing business very extensively at his capital he might as well save the profits on the stamp making. The Bureau makes the plates from which the stamps are printed, does the press work and manufactures the mulligins. Only the paper and the ink are purchased in open market.

This preparation of the mulligins is an art in itself, and is conducted upon purely hygienic principles, for the benefit of the several billions of people who annually lick postage stamps.

The operation of the manufacture of postage stamps through the several branches is an exceedingly interesting one to follow. A small army of men and young women, skilled artisans, are employed in the work, and the great brick building on the banks of the Potomac under the shadow of the Washington monument is a busy beehive for eight hours in the day.

accounted for and locked in a vault. Until the last plate is in no employ of the division is allowed to leave the building.

The plate now being finished, it is



TRIMMING THE STAMP SHEETS.

sent to the pressroom. Some of the stamps are printed upon hand presses and others upon revolving steam presses. The day invited the Bureau the hand presses were working upon four stamps. There were twenty of these upon a sheet, and the printer and his assistant were enabled to turn out from 700 to 800 sheets a day.

The pressman's assistant is always a young girl, as a woman's deft touch is required to handle the thin sheets of paper and place them accurately under the press.

The paper upon which the stamps are printed is made especially for this purpose, and every sheet of it is counted. In fact, from the time the paper enters the press until it emerges a sheet of stamps to the storage rooms every one of which registers the sheet, and these count tally as to totals at the close of the day before an employe is permitted to leave the building.

Every time the pressman runs a plate through his machine he removes it and reinks it. Upon this largely depends the perfection of the impression. After inking the plate he rubs the surplus ink from the surface with a brush. Then he passes his hands

over a cake of chalk and rubs the plate thickly with his bare palms. This cleans the exposed parts of the plate thoroughly and leaves the ink in the lines which are to convey the impression to the paper.

The printer soon becomes a mass of ink from his hands to his clothes, and sooner or later comes unincubated to his face, as well as dabbling it over his apron. A carmine colored ink is used in printing the two-cent stamps, and the pressroom has a decidedly sanguinary appearance. The young lady assistants average about \$1.25 a day, while the pressmen run from \$4 to \$6 a day in earning capacity.

Where the steam presses are used four plates, each one printing 400 stamps, work upon an endless chain passing in front of the pressman. In this operation his duties are confined to cleaning the plates with his hands, as described above, the machinery doing the inking and pressing. He can press about seven sheets every sixty seconds, and has two young women to assist him, one to feed the press and the other to remove the sheets.

The sheets of stamps are now ready to be gummed, perforated and dried. After the ink has been dried and the sheets pressed that they are sent to another room, where another gang handle them. The gumming machine is a simple apparatus which distributes an even flow of mulligins upon the reverse side of the stamp. It is done automatically, so that there is no waste and no surplus of mulligins upon any part of the sheet. The mulligins are composed of pines and desterine, mixed in stipulated quantities and absolutely harmless.

When the sheets are coated with mulligins they pass upon an endless chain through a steam chest about sixty feet long, where they are subjected to a temperature of about 135 degrees, coming out after several minutes thoroughly dried. Then they go to a hydraulic press to be pressed flat, having become warped in the steam chest. The sheets are laid between stiff cardboards and a stack of them put into the machine, where they are subjected to a pressure of 5000 pounds to the square inch. There are no wrinkles left when they emerge from this gentle squeezing.

Their next journey is to the perforating machine, operated by skillful young women. This is apparently a simple piece of work, but it requires close attention to feel the machine, so that the perforating wheels run straight down the spaces between the stamps. Even with the utmost care slips occur, and a row of stamps is perforated down the middle. Every spoiled sheet is preserved, however, to be accounted for, and if so much as a corner of a stamp is torn off it must be

patched on again, so as to present a whole sheet to the next checker.

One of the most interesting places in the building is the room where the stamps are examined and counted. This is an immense apartment, filled with long tables, at which several scores of young women are working. Piled upon the tables in front of them are stacks of ten dollar, fifty dollar or one hundred dollar bills, government bonds and sheets of stamps. A rushing sound like the whisper of the wind through a thousand trees fills the room, as the counters rapidly turn the bills and sheets, keeping a mental tab upon the number, while their eyes, trained to the utmost vigilance, seek out imperfections in the printing.

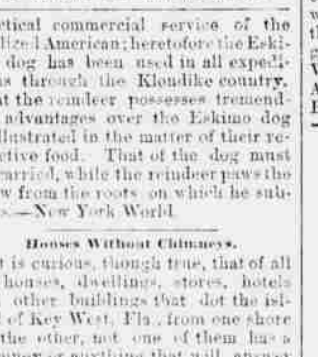
I saw one young woman at work counting and examining the stamps whose record was from ten thousand to twelve thousand sheets a day. Her fingers seemed to fairly fly as she lifted the sheets, and although it was but a fraction of a second during which the stamps passed under her gaze, her quick eyes would detect the least imperfection, passing over two hundred stamps in that time. For this skillful and exacting work these young women are paid from \$1.50 to \$2 per day.

When the perfect sheets are thus assorted and counted, they pass to the storage vault, a fireproof and airtight structure. The Bureau keeps a stock of about six hundred million stamps on hand constantly. They are furnished to the Postoffice Department at the rate of about twelve million daily, upon requisition by the Third Assistant Postmaster General. A steel wagon, with padded doors and recommended by a mail of annual town, comes the stamps to the Postoffice Department. This wagon is allowed to transport currency and bank notes to the Treasury Department, and once trundling along the street with millions of money inside of it.

KLONDIKE PALACE CARS.

First Effort to Put Reindeer to Use in America.

The rush to the Klondike has been the means of establishing a novel transportation line at Circle City, Alaska. Twenty sturdy-looking reindeer, selected from the United States Government reindeer herd at Fairbanks Station and are now on their way to the mining district. This is the first effort to press the reindeer into the



ALL ABOARD FOR THE KLONDIKE.

practical commercial service of the civilized American; heretofore the Eskimo dog has been used in all expeditions through the Klondike country. That the reindeer possesses tremendous advantages over the Eskimo dog is illustrated in the matter of their respective food. That of the dog must be carried, while the reindeer paws the snow from the roots, on which he subsists.—New York World.

CURIOUS WITHOUT CHIMNEYS.

It is curious, though true, that of all the houses, dwellings, stores, hotels and other buildings that dot the island of Key West, Fla., from one shore to the other, not one of them has a chimney or anything that will answer the purpose of a chimney. Handsome residences and lofty hotels are alike in this respect, and from an eminence facing out over acres of roofs on all sides one is struck with the want of something to complete the symmetry of the picture. Woodland coal or fuel of any kind are unknown quantities, as the tropical atmosphere furnishes all the heat required, and for cooking purposes sticks of carbon are used, which are sold by peddlers, who hawk their wares about the streets.—Atlanta Constitution.

PRINCE OF PIGEONS.

He Flew 1000 Miles in Seventy-five Hours and Holds the World's Record.

Pelro, the great homing pigeon which broke the world's record for 1000 miles in his swift journey in the air from New Orleans to Michigan, Ind., is the pride of the Michigan Homing Club. Pelro's superb race was made in seventy-five hours total, or less than six hours of actual flying. Carrier pigeons never work later

dark. Pelro is a pretty red pigeon, is three years old, and is owned by Secretary Tallon, of the club. Pelro is a brother of Lulu, the winner of the 500-mile race in Mississippi. Both are imported birds. When Pelro arrived at Michigan he flew straight to his loft, seeming none the worse for the journey.

During the year 1896 dead dogs to the number of 10,992 were taken out of Chicago.

A HIGH WATER TOWER.

Is 102 Feet High and Has a Capacity of 2000 Gallons.

The towns of the plain districts are forced to resort to various expedients to obtain a suitable pressure for the distribution of their water supply. At Warren, Ill., the water supply is distributed according to the Engineering News, from a water tower of masonry 102 feet high from the water table to the bottom of the tank. The masonry is founded on solid rock about twelve or thirteen feet below the water table. At the level of the water table the walls are four feet thick, and from this they decrease with a uniform taper to a thickness of two feet at the top. The masonry is of limestone laid in cement mortar. The tank is made of red Louisiana cypress and is twenty-four



WARREN, ILL., WATER TOWER.

feet high and twenty-one feet in diameter, with a capacity of 2000 gallons. The standpipe which supplies the water to the mains is two inches in diameter and is connected with the bottom of the tank with an expansion joint and a balance float valve. This valve automatically shuts off the water when the tank is full.

Water is pumped to the tower from a deep well located in the brick power-house about sixty feet away. This well is about 800 feet deep. The water is lifted from the well to the top of the tower without rehandling. Eventually the water will be discharged into a reservoir, where it will be handled by another pump for fire service, but in the meantime a very fair pressure is had direct from the tank, which is elevated some forty or fifty feet above the larger part of the town.

A COUNTESS CREATES A STIR.

She Declares That Dancing Has Degenerated into a Graceless Romp.

The Countess of Ancaster, who has created a great stir in the fashionable world of London by her declaration that dancing has degenerated into a graceless romping, is the wife of Lord Willoughby de Eresby, the Baron of Aveland. The Countess's daughter, Evelyn Clementina, is married to Ma-



COUNTESS OF ANCASTER.

jeffrey Sir Henry Ewart, the Queen's equerry. The fact and the very high social position of the Countess herself, gave more than ordinary importance to her opinions upon matters concerning society, and dancing is certainly one of these.

OUT OF SORTS.

Many common expressions are of legitimate parentage, although most people believe that they spring up like Topsy. The printed craft, for instance, originated several very popular sayings. Take the case of a man who is "out of sorts." This handy composition printing after the word "sorts" applies to the letters and marks which should be in the type case, but which are commonly missing. A man who, in the days before the coming of the printing machine, found his "e" box empty in his copy box desolates and is a despair was said to be out of sorts. The expression, by its profanity the reality was made known, and by its import it was made known. When Pelro arrived at Michigan he flew straight to his loft, seeming none the worse for the journey.

Crude petroleum is an excellent remedy for rheumatism.



PRINTING INTERNAL REVENUE STAMPS.



A STAMP ENGRAVER.

TO BE CONSIDERED!

Then and Now.

A magazine published in Philadelphia in 1818 gave the following as a list of news: "In the course of the twelve months of 1817, 12,000 wagons passed the Allegheny Mountains from Philadelphia and Baltimore, each with from four to six horses, carrying from thirty-five to forty hundred weight. The cost of carrying was about \$7 per hundred weight, in some cases as high as \$10, to Philadelphia. The aggregate sum paid for the conveyance of goods exceeded \$1,500,000." To move a ton of freight between Pittsburgh and Philadelphia, therefore, cost not less than \$140, and took probably two weeks' time. In 1886, the average amount received by the Pennsylvania road for the carriage of freight was three-quarters of one cent per ton per mile. The distance from Philadelphia to Pittsburg is 385 miles, so that the ton which cost \$140 in 1817 was carried in 1886 for \$2.87. At the former time the workman in Philadelphia had to pay \$4 for moving a barrel of flour from Pittsburgh, against twenty-eight cents now. The Pittsburgh customer paid \$7 freight upon every 100 pounds of dry goods brought from Philadelphia, while 100 pounds is now hauled in two days at a cost of fourteen cents.—Scientific American.

LEARN—Do you mean to say Maud is going to marry that ugly fat old man who took her out to supper just now? Laura—That's what everybody says. "What a bitter pill he must be!" "No, he's sugar coated. He is a wealthy confectioner."

It was all he could do to stagger to the open air, weak with the loss of blood and exhausted from the struggle in the cave.

"Hold!" Amid the confusion and horror of his supreme moment of peril, Darrel Grey was struck by the word which was pronounced in a tone that thrilled him with familiar accents.

"Then, too, in the flare of a torch carried by a man near the tree from which he hung suspended, the form of a newcomer on the scene was vaguely visible."

"He's a loss thief, Ranger Ralph."

"An' a train-wrecker. He answers the very description."

"The rope was quickly stacked. Darrel fell in a heap to the ground, living, but insensible. The man who had saved his life spoke promptly to the lyncher."

"Now get him to my cabin and take care of him, and don't make any mistake next time," he remarked.

It was Ranger Ralph who thus interposed in such a manner in behalf of his acquaintance of the Ten Spot depot. He had returned to Mines' Gulch that