

The Philippines will start in with the Merritt system and allow other civil service problems to follow at leisure.

The mercantile marine of the United States has been increased by the addition, in a lump, of fifty-three vessels by the annexation of Hawaii.

The raw silk industry of Japan includes an annual production of about 7,500,000 pounds. Of the average exports more than half are to the United States.

The whole Hobson incident is flue, but there is nothing finer in it than his turning his back on cheering crowds to plunge at once into his technical duty as a naval constructor. The assignment was made and accepted as bare matter of course. This illustrates the spirit of our whole navy.

On top of the news that the Chinese Emperor has ordered the establishment of universities on the European model comes the report that the younger Mandarins have established a reform society; and, though their meetings were for a time forbidden by authority, they have been resumed under the presidency of the Emperor's tutor.

The financial supplement to the Street Railway Journal recently issued, devotes some space to a comparison of gross receipts by leading street railway lines in the United States in the years 1897 and 1896. It shows that in 1897 the twenty-six properties earning more than \$1,000,000 gross per annum increased their income 2.20 per cent.; those earning from \$500,000 to \$1,000,000 lost .11 per cent., and those earning from \$100,000 to \$500,000 gained 1.87 per cent. The aggregate gain showed by all of the 175 roads included in the summary was 1.9 per cent.

Mr. George B. Waldron, in an article in McClure's Magazine shows that in the twenty years following 1793, Napoleon cost the British and French not less than \$6,500,000,000 in money and 1,900,000 lives—the latter number equal to the entire adult male population now living in Greater London and Paris. In the one battle of Waterloo 51,000 men were lost, 29,000 of whom were British. The Crimean war of two years cost the nations engaged in it \$1,500,000,000 in wealth and over 600,000 of their citizens. The Franco-German war cost over 200,000 lives and required an expenditure of \$1,500,000,000. France had in addition to pay an indemnity of 1,000,000,000 and to give Alsace-Lorraine, a total loss, it is estimated, of not less than \$3,000,000,000.

While the soil of the Hawaiian group of islands is prolific in fruits of almost every kind, the manufacture of sugar is the chief industry of the inhabitants. In 1896 the exports of sugar amounted in value to \$14,932,000 out of \$15,436,000, the value of the entire exports. For the same year the total imports aggregated in value \$7,165,000. Most of the trade of the islands for some time past has been carried on with the United States. The public debt of the islands on January 1, 1896, aggregated \$3,754,335; while the yearly income from direct taxes, customs and licenses is approximately \$1,740,000. In spite of the wealth of the islands, the chief attractiveness which they possess for the United States grows solely out of their strategic position, says the Atlanta Constitution.

Statistics translated from the Archiv fur Eisenbahnen, a publication of the Prussian ministry, show that in the five years 1891-5 America has built more miles of railway than any of the other continents, the increase for that period being 16,998 miles, making a total of 229,722, as against an increase of 13,732 and a total of 155,284 for Europe, an increase of 4867 and a total of 26,890 for Asia, an increase of 1647 and a total of 8169 for Africa, and an increase of 1566 and a total of 13,888 for Australia. When put in percentages, however, the additions to the African lines head the list, for the record of that country is 25.2, with Asia second, 22.1, and Australia, Europe, and America following in order with 12.7, 9.7, and 8 respectively. At the close of 1895 the railways of the world, if joined together, would have gone around it at the equator more than seventeen times, for the aggregate mileage was 433,953. Of this nearly a tenth was built between the end of 1891 and the beginning of 1896. This is the first four years in railway history that construction has not advanced proportionally as well as absolutely more rapidly on this continent than elsewhere, but we still have more miles of railway than all the rest of the world united.

### CASTLES IN SPAIN.

How fair they rise  
From hyacinthine meadow-ground that  
Within the shade,  
By snow-capped heights of wild sterrans  
made!

How gleaming white  
Those battlements beneath the morning  
light!  
How marbles show  
Their brilliancy against the eternal snow!

How roof and spire  
Are daily kindled to a flashing fire,  
And over all  
Folds of silken banner rise and fall!

The court below  
Is moated with a stream of gentle flow,  
Whose crystal face  
Reduplicates the beauty of the place.

The perfumed breeze  
Comes through the branches of fruit-laden  
trees,  
And song of bird,  
Flute-like and mellow, from the copse is  
made!

With soothing sound  
Cool fountains scatter jewels all around,  
In flashing spray  
The rainbow bends its arch above our way.

Go enter there  
With chosen friends we bid our joys to  
share;  
We rest at ease;  
We go again at any time we please.

From mortal eyes  
Were veiled the glories bright of Paradise,  
Yet there remain  
These glorious castles all our own—in Spain.  
—New York Home Journal.

## THE GRAY STEER.

Twelve hundred feet high is the annual of the Lazy J Ranch and nearly as broad—that cliff of divers hues which stands out from the wall of the canon of the Grand river.

The opposite precipice serves the cowboys as gnomon or index to the hours of day, for its shadow sweeps over the stupendous, variegated face and marks the course of the sun through a sky that is always unclouded. A ledge of porphyry, fifty feet deep, crowns the dial; often it looks like a strip of pink ribbon to the men below by the stream. But it was a glorious coronal, kindling in the first rays from the east, when Holden hailed it with uplifted eye and hand as he quitted his horse through the barway of the canon.

"Sunup," cried Holden, the young foreman, filled with the joy of the morning. He is the son of the president of the cattle company; he had come straight from college to the cow-camp, and the old stroke of the "var-sity eight set a hot pace in saddle for the Lazy J riders.

He rode that morning a big-boned, Roman-nosed, blue-roan "outlaw"—a horse pronounced irreclaimable by the boys; he had tied a bucking roll across the shoulders of his saddle to supplement the grip of his knees, and on top of that lay the big, loose coil of his fifty-foot cable line, for he was still young enough to disdain a lariat of lesser length and caliber.

Behind Holden Navajo Jim lifted a light left foot to the stirrup; then his spurred right tripped clinking to the evasive dance of his young horse, and he slipped inimitably into his saddle. To its right shoulder hung the trim coiled ring of his rope of braided rawhide, which, to that of the foreman, was as steel to iron and would hold anything on hoofs.

Foreman and follower struck out through the greasewood over ground without grass; the grazing range lay high on the mesa, fenced by the lofty wall of the canon. Its seemingly inaccessible height was sealed by a sure-footed, agile range cattle at a break in the porphyry ledge not far up the canon, and presently they took to the dizzy trail.

With slack cinches the blowing horses clawed up the loose footing at the top of the break and moved out on a narrow projecting tongue of the mesa. Still higher the mesa broadened and was set with squat cedars and pinons. Here the riders saw cattle already chewing their ends in the shade.

"We're too low down. There's nothing here," said the young foreman, his eyes roving over the stock.

"It's beef I'm after. I've got to get a train-road off by the first and not a hundred steers gathered yet!"

"Quaking-asp putty good place for steer now," said Navajo Jim. "Water sweet there and stampin'-ground close."

"Yes, I know," Holden returned, impatiently. "The boys started twenty head down yesterday and had them pointed for the corral, when that blamed gray steer scattered the bunch, and they broke back for the hills."

"That gray steer like bull elk. Better corral him with six-shooter," said Jim. "One steer not much worth."

"Six-shooter nothing! What's our ropes for?" cried Holden. "That big grizzly brute will fetch up a whole carload to the top notch in the stock-pens. He goes on hoof to Omaha. I told the boys I'd give a \$50-dollar saddle to the first man that 'twined' him and stayed with him."

"I already got putty good saddle, Mr. Holden," said Jim, with a grin. "That steer seven, eight year old now, and all time run wild. Horns so long stick clean through horse."

"Well, beef's up in the air; horses are down," returned the foreman. "Quit up, Jim. We'll strike up higher."

On the loftier grazing-ground they found the cattle still at feed. Through thickening hosts of deer-flies and horse-flies their horses strained up the steep oakbrush slopes. In banded resistance to like winged attacks, the cattle of the higher range were beginning to "bunch" on each open stamping-ground. Toward these trampled circles the scattered steers were one by one making their way.

"The boys can run in all these steers tomorrow," said Holden. "You and I, Jim, are going to twine that gray steer today."

"He got big scare yesterday; too sharp to show up on stampin'-ground today," Jim suggested.

"Like enough," Holden assented, "but we'll rustle him out. The boys lost him late yesterday in the long quaking-asp patch in that gulch up there, just below the rim-rock."

He pointed to the rim-rock of the spruce ridge, rising yet loftily above

them with innumerable aspen gulches and brushy slopes draining down into the side canons.

Quickening their horses, they presently rode into the green gloom of the gulch, where the quaking-aspen trembled over hidden springs. Here mighty hoofprints dented deep the mud and the sodden trails.

"Dere his track, fresh," said Jim, stooping from his saddle over a print like a post-hole. "He lie close, somewhere."

"We'll put him up," said Holden, confidently; "and once he shows, stay with him, Jim."

"You bet I stay!" said Jim, simply. They threaded the winding thicket on separate trails and met near its head without a sight of the gray steer.

"It's no use looking for him down in here," said Holden. "He's gone up higher. Let's try in the spruce below the rim-rock."

He led the way upward along the steep, brushy side of the gulch until, stopped by the rim-rock, they sat in their saddles and looked down and back in disappointment.

Below them the gulch enclosed the fastness of the deer, a space darkened to twilight by a growth of young spruce and aspen saplings.

"Maybe he down in those," said Jim, with a drop alike of voice and hand. "Hide himself in daytime like blacktail buck."

"But we can't get into that 'pocket' on horses," Holden replied loudly, in vexation. "Wait! I'll try for him!"

As he spoke he dismounted to act on a boyish inspiration.

He had noticed a big block fallen from the rim-rock and lying tilted up on the slope. With mighty heaving he overturned it, and down the slope it crashed in smashing leaps through the brush and swaying timber to the very heart of the spruce thicket.

Snorts came up from below; Holden marked the course of startled, hurrying creatures by the lines of swaying tops furrowing the still, green surface, and three grand bucks sprang out, their horns showing brown in the velvet as they topped the lower brush; but a beaver of mightier horns was breaking through the pliant young trees, and a glimpse of a grizzly hide was exultantly caught by the young foreman.

"Ah, he show up now!" shouted Navajo Jim, erect in the stirrups, as the great steer came out below.

Bred from the finest of the Lazy J stock, he would have weighed near 2000 pounds; but such speed and bottom were his "rustling" on that rough range that the big body rose over the brush with the wild grace of a buck, and with deer-like ease his frontlet, black and threatening, was thrown back over his grizzly shoulder as he stopped and eyed his hunters for an instant. One defiant shake of his perfect horns, then he raced onward, and only bending brush marked his path.

Holden was already galloping after him, smashing the undergrowth in a straight course down the slope to intercept him below, shouting as he ran. Jim, with Indian circumspection, ran his horse in an easier descent along the slope, keeping his eyes on the swaying brush beneath and waiting for an opportunity of closing in more open ground.

Now Holden's horse, the blue outlaw, showed once more his spirit and brought Holden close behind the game. Navajo Jim emerged from the thicket to see the young foreman in full career, swinging his big rope, while the haltered head of the horse and the huge-horned frontlet of the steer reached out in an even race across the little open space beyond.

The loop of Holden's cable lit fairly over the widespread horns; but his hand was hardly quick enough in closing it. While it hung slack the steer leaped with both front legs through it, and then Holden's tardy jerk brought it tight around the grizzly flanks.

The beast bellowed as the plunge of his great gray body drew the turn of the rope swiftly from the saddle-horn. Vainly Holden tried to stay it. Recklessly he threw the slack end in a hitch around the steel horn and clapping his hand over it braced his horse for the shock.

With forelegs outplanted and quarters lowered, the stubborn blue outlaw stanchly set himself to the tightening rope. For an instant he was jerked along, stiff-legged, then over they went, dragged down, fierce horse and reckless roper.

Clearing his legs, hanging at the side of his struggling horse, Holden still held the saddle-horn with powerful grasp. Another bawl, a plunge that no cinches could withstand—and, lo, the saddle was stripped from the outlaw and jerked high and far from Holden's hand!

Navajo Jim checked his horse, but "On!" roared the young foreman, and

on the obedient Indian spurred after the wild steer and the flying saddle.

The great steer seemed scarcely to feel the 50-pound drag of the bumping saddle. Yet it tightened the rope about loin and flanks, and by making it harder for him to breathe so lessened his speed that Jim easily kept him in sight. Through yielding brush and swaying thicket, through bunches of frightened cattle that split to let him pass and came stringing after, bucking and bawling in sympathy, the brute plunged on.

Each bawling bunch in turn was distanced. The brushy slopes broke away. As the mesa, sprinkled with pinons, began to offer to Jim smooth spaces for handling his horse, he unbuckled the strap that held the coil of his rope, but still, as every leap of the steer took him the nearer to the corral, the wise Indian only held the rawhide ring ready in his hand.

Down the rapidly narrowing tongue of the mesa—the mesa which tipped precipitously out into the river-gorge and was bounded on either side by an abyss—the trapped steer sped. He must soon be at a standstill or attempt to return on his tracks.

The Indian's eyes had already kindled with anticipation of triumph, when at the last of the pinons the bumping, hurtling saddle caught fast between projecting roots. It scarcely checked the steer! Holden's cable tore loose from the saddle-horn, and its slackened loop was speedily kicked from the steer's high-plunging haunches. Once more the great gray brute was free.

"Ah, he on the push now!" said Jim and looked to his loop as the steer reversed his big body, gave a high, writhing leap over the spurred rope, confronted the herder with the threatening crescent of his sharp horns and plunged forward to the combat.

The Navajo lifted his horse aside with the spurs, swung the loop open in his right hand and rose, half turned in the stirrups, in a quick underthrow for the front hoofs of the steer as he lunged by.

Jim's eyes saw, for an instant, lowered horns and uplifted hoofs mingled together, and his throw was true. But so quick was the play of the ponderous feet that the loop caught one foreleg only and passed over the face and hung across the horns.

The loop, drawn tight by the roper's instantaneous jerk and kept from slackening by his nimble horse, bound horn and hoof together. Now the steer was in sad plight. With head drawn sidewise, with tongue lolling from open jaws, bellowing, he surged on three legs, but his spirit was unbroken.

The roper slowed his horse to the strain. From horn to cantle the saddle creaked, as trampling and tugging in a wild, wide waltz, straining horse and hauling steer made the mad circuit of the precipices.

The Navajo, active in the saddle with rein, spur and rope, was in spite of all his efforts, dragged past the break where the trail ran down the slope. His horse, always straining desperately, was tugged on and on until he circled along the perilous porphyry brink, and Jim glanced longingly from the saddle on the corral, seemingly almost directly beneath him, its great square shrunk to the measure of his saddle-blanket.

Holden, pounding down bareback on the blue roan, had stopped to gather up his rope, but now Jim heard his encouraging shout. The quickened tramp of his rushing horse, the whirring of his big rope as he swung it aloft, sounded close at hand, and the sweating roper relaxed his strain.

The steer, alert to the slack, jerked his hoof from the loop. Heedless of the cutting rope, instantly tightened across face and frontlet, his stately head was lifted, and he stood, wild-eyed, quivering, cornered, caught but not conquered. He was on four legs again. Conquered? Never! With resistless pull on the rope, he wheeled and broke for escape across the cliff that rises, red-banded, above the corral.

"Stay with him, Jim!" roared the young foreman, swinging his rope, sure the steer would stop at the edge. Stay with him? It meant death surely. Already under the plunging front hoofs of the desperate rebel the porphyry rim crumbled. Jim's obedience did not falter, although he was fairly staring down on the corral. How would the falling feel?

The Indian had a swift picture of it—the steer lowest in the air on the tant larlat, horse and man whirling after—but Navajo Jim set his savage jaws. No foreman should dare him to stay with a roped beast! He would not look on the faces of white ropers sneering. He was hired body and soul—he was obedient—he would stay.

Holden, for this mad second, watched incredulously. The steer would not go over—surely not. What? Straight on! And Jim! Was the man also crazy? Then the Navajo heard once more his master's voice.

"For God's sake, Jim—let go! O heavens!"

Jim obeyed. He flung loose the rope, but on his horse staggered. And the black length of the larlat was still whipping out with the defiant horned head that pitched off into space when the agile horse saved himself and his rider on the very brink.

Holden dropped his useless rope as the Navajo, skimming the porphyry edge like a swallow, rode back and stared into the eyes of the white man.

"He was brave, that steer," said Jim, with a queer choke in his throat. "He saved himself from the stock-pens."

Holden held out his hand and grasped the Indian's. "You beat my time, Jim," was all he said, but something in the tone called a new pride into the Navajo's stern face.—Frank Oakling, in Youth's Companion.

## HUNTING SPANISH SPIES

### HOW OUR SECRET SERVICE FOILED THE ENEMY'S EMISSARIES.

The Thrilling Capture of Downing, the Principal Espion—He Saw His Finish and Believed the Government by Committing Suicide—Chief Wilkie's Exploit

The secret service of the government during the war has been employed mostly in discovering and thwarting the efforts of Spain to get information and gain certain ends in this country by means of secret agents. That the secret service has been successful has been attested by Lieutenant Carranza, formerly of the Spanish legation in Washington and the head of the Spanish spy system in this country. In his published letter setting forth his hopes, plans and experiences he referred to the work of the secret service thus:

"The Americans are showing the most extraordinary vigilance. They have captured my two best men." And he might have added: "In a moment one of their men will come into this room, take this letter, send it to John Wilkie, chief of the secret service of America, who will thereby be informed officially, as if I were to confess to him myself, all that I have done and all that I hope to do."

An illustration of how the secret service does its work was given by Chief Wilkie during a conversation in his private office:

"The Downing case was taken up by us and we disposed of him," Chief Wilkie began, "in less than one week. I was warned that George Downing, a former sailor on the cruiser Brooklyn, had entered the Spanish spy service. He was located on arriving in Toronto. When he went to pay his first call to the attaché of the Spanish legation my man was within earshot and heard every word that passed between them. He heard all of the instructions Downing received, and when Downing left the room my man met him as if by chance and asked for a match to light his cigar. He walked with him to the hotel office, got a good look at him, followed him to his hotel, learned his assumed name, got a tracing of his handwriting from the register and later shadowed him to the train."

"Then he telegraphed me that Downing had left for Washington on the 5 o'clock train, sent me a full description of him, and when the train arrived here three of my boys spotted him. They followed him to a boarding house, where he left his grip. Then they followed him about town and back to his house. After an hour or so he came out and walked to the postoffice. When he dropped a letter to his Spanish employer in Toronto through the postoffice receiver, the letter fell into the hands of one of my operatives and was brought at once to me, while the other operatives followed Downing back to his boarding house. I opened the letter and, upon reading it, communicated with the war department, which decided upon a military arrest. Soldiers were sent for, and taking a few operatives with me, we went to Downing's house. He was still there, and we waited till the extinguished lights told us he had gone to bed.

"Then we knocked at the front door. The mistress of the house thrust her head through the window and declined to let us in till I threatened to break down her door. Then, very much frightened, she admitted us. Leaving the soldiers below, I took two of my men, and bidding the landlady go before, went up to his door. I bade the landlady knock and tell Downing that some friends from Chicago wanted to see him. She could leave the rest to me. She did so. Downing bit at once and could hear him dressing. The hall was dark, and we stood on either side of the door. When he opened the door he was in the best possible situation for capture had he been disposed to put up a fight, for he was in the act of putting on his coat and had one arm through his sleeve and the other only half through, so that he couldn't have used either to advantage. I grabbed him by the collar and explained our errand briefly. Instead of fight, he witted like an icicle on the Washington pavement in July.

"Entering his room, we found his effects, the cipher he was to use in telegraphing to his Spanish employer, some destroyed correspondence; in fact, everything necessary to make out a perfect case. He never recovered from his collapse. He had brains enough to see that it was all up with him. We turned him over to the military prison, and there, after a severe attack of melancholia, he committed suicide by hanging."

Chief Wilkie is under 40. For years he was city editor of the Chicago Tribune. He left journalism to go to London and went from there to the secret service.

Not long ago Secretary Gage asked Wilkie to do a bit of special work for him. The work required much shrewdness. Wilkie performed the task so quickly and satisfactorily that Gage offered him the place he now holds.

The Sleep of Plants. All close observers are aware that many sorts of plants have what answers to the appearance and position of sleep. They fold in their leaves, the blossoms close their petals and they sometimes assume a drooping habit that clearly indicates the object of this change in appearance. It has been ascertained that this position is also taken as a precaution against too large deposits of moisture from the atmosphere. If the leaves and petals were spread out there would be more surface to catch the dew. The plant folds itself up and thus promotes a greater circulation of the sap and the consequent nutrition of the entire structure.—New York Ledger.

## THE NAVY'S MINIATURE SEA.

### A Great Tank in Which Models of New Warships Are to Be Tested.

Close to the water front at the gun factory in Washington the first experimental tank of the navy is being rapidly completed, and by the time bidders have submitted proposals for the construction of big battleships and monitors recently called for, it will be ready to test miniature models of paraffine and wax, representing the proposed new additions to the country's fighting strength on the sea. There is no tank in the world equal to this one in size, equipment and completeness of its electrical devices. It is longer and wider than the best owned by foreign countries, and covers an area of water fully capable of floating some of the largest torpedo boats. It looks like an immense natatorium, and, in fact, would make an excellent one.

The plan of having a big tank, hosed over, with brick sides and concrete bottom, in which little models of all new ships to be built for the navy should be tested, was suggested some years ago by Chief Constructor Hitchborn, who had noted the excellent results obtained in Great Britain and France by testing designs of new ships before their actual lines were decided upon by constructing small models and having them towed through the water at given rates of speed. The resistance offered by the models to the water formed a basis on which close estimates could be made of the probable speed of the actual ships when in service, and faults in designs could be readily detected and corrected before the vessels were completed. Two years ago Congress appropriated \$100,000 with which to build a tank, and under direction of Constructor Taylor the work has so advanced that it will be available in a few weeks.

When a new vessel is to be built, a model of it is made about eight feet long, care being observed to have the lines accurately moulded. This model is made of wood and covered with a mixture of paraffine and wax to give it a smooth surface. Running the entire length of the tank, several feet above the water is an electrical trolley apparatus, to which the model is attached, and by which it is drawn through the water at certain fixed speeds. The waves created and their character are noted, and the disturbance caused ahead and the general effect produced on the water by the vessel are closely watched. Where defects are apparent the designs of the proposed vessel are altered to correct them, and by this means the constructors can estimate accurately just the amount of steam power required to send a vessel of a certain displacement and design through the water at a given rate of speed. Models are now being made of the three new battleships, which will be the first tested in the new tank. It is expected that some valuable lessons will be learned from the experiments by which improvements may be made in the plans of the ships.—New York Sun.

QUAINT AND CURIOUS. Australian savages eat the green ant raw. Chinese babies are fed on rice and nothing else after they are a few months old.

The smallest theatre in the world is Professor Herkomer's in England. It seats only 130 persons. Chocolate is still used in the interior of South America for a currency, as are coconuts and eggs. Twelve girl friends of the bride at a Kansas wedding supplied the music by whistling the Wedding March. William Neff of Colorado unearthed six baby coyotes on his ranch, and trained them so that they follow him like dogs.

It is said that in many Welsh villages the yew tree and the church are of the same age, the one being planted when the other was built. A lighthouse of bamboo has been built in Japan. It is said to have greater power of resisting the waves than any other kind of wood.

Tin is one of the oldest known metals. The Chinese have used it in the fabrication of their brasses and bronzes from time immemorial.

Hebrew guides in Rome never pass under the Arch of Titus, but walk around it. The reason is it commemorates a victory over their race.

Within a year Thomas Sanderson, six years old, of Fall River, Mass., has fallen from a second-story window, drank a pint of kerosene, been run over twice, and escaped without breaking a bone.

People of St. Thomas, Canada, were so superstitious that they wanted a supervisor to revise the lists when they were told that their town had increased but thirteen inhabitants during the year.

Screen Doors Made in Winter. Screen doors, such as are used to keep out flies and other insects, are made almost wholly by machinery. They can be bought in various sizes in stores, like any other merchandise, and they are sold so cheap that they are now more commonly used than ever. Like many other articles used in summer, screen doors are made in winter in factories that may be occupied in summer in the production of snow shovels. Screen doors are shipped from the factories to large wholesale buyers in carload lots. The wholesale trade in them begins in April and ends about the 1st of July, the retail distributing continuing later. Screen doors are sold everywhere in this country and they are also exported.—New York Sun.