

# Science and Invention

Recent discovery in Jerusalem proves that the ancient aqueduct which brought water from Bethlehem through the Hinnah Valley, thought to be the work of Herod, was built by the Emperor Severus, 195 A. D. Inscriptions to that effect have been found.

Electric lamps are to be substituted in the place of gas jets in England's famous abbey. It is averred that gas has proved injurious to the great church by setting up chemical change in the limestone of which its walls, arches, vaults and carvings are composed, thus hastening the disintegration of the building.

Signor Ceceole, of Padua, has discovered the existence of more than fifty noxious microscopic parasites and microbes in the washings of vegetables from market gardens. Among the micro-organisms found by him was the bacillus of tetanus and another analogous to that which produces typhoid fever. He ascribes the infection largely to the contents of watering pots.

A simple device has been put into practice for "truing up" or restoring the original symmetrical shape to railway carriage wheels, and it is said to have been attended with considerable success. It consists of a brake shoe, which is formed with pockets filled with a grinding material. When a wheel becomes flattened it is necessary only to remove the regular shoe and replace it with the "truing" shoe, run the carriage and do the braking as usual.

The French chemist Baland has recently analyzed an annual food-plant called woandou, growing in tropical Africa, and introduced in Southern Asia and Brazil, and his conclusions are interesting. It is, he says, the first fruit, in the natural state, that he has ever examined which shows all the chemical properties of a perfect nutriment. Two pounds of it would supply the daily requirements of the human system. Like the peanut, it matures underground. Its edible kernel is shaped like an egg. It furnishes a very white flour whose favor, after cooking, resembles that of chestnuts.

Count Fosse, of Sweden, has invented an apparatus for stopping the headway of boats, which, he thinks, will be useful in preventing collisions between vessels of all kinds. The apparatus, which has recently been tested on a large steam-launch, consists of steel-plate shutters, applied on both sides of the vessel about one-quarter of its length from the stern. These can be opened and shut by the helmsman, with the aid of a lever. When the launch was going at full speed, nine knots an hour, it was stopped in fifteen seconds, within half its length, by reversing the engine and extending the shutters.

Some of the most useful products of our planet are confined to small areas of its surface, situated at a great distance from the main centers of population and industry. India rubber is one of these, and according to a report from Consul General King at Bangkok, teak, the most valuable ship timber in existence, is another. Extensive tea forests, he says, are restricted to Burma, Siam and Cochinchina. There are only three ports in the world from which teak is exported: Bangkok, Moumein and Bangkok. It is a beautiful dark-colored wood, taking a high finish, and its value in ship-building depends upon its strength, its durability, its resistance to both moisture and drought, its non-liability to be attacked by boring insects, its lightness in the water, and its resistance to the influence of iron when brought in close contact. In this last point of excellence it has no substitute as a backing for armor plate.

## OPERATION ON AN OSTRICH.

How the Surgeons and Assistants Conquered the Big Bird.

A carload of ostriches came into Indianapolis by freight the other day. Their presence was made known by an impatient ring at the telephone of Dr. Garstang, local surgeon of the Big Four. The doctor answered:

"Can you treat ostriches?" a voice asked.

"I might," said the doctor, thinking some wag friend was talking. "Or I might treat parrots or humming birds, but I don't make a specialty of it."

"I'm not kidding," the voice continued, as he explained that he was the Brightwood station agent and that a carload of ostriches was "hung up" there. He further explained that one of the birds had accidentally cut its neck and there was fear that it was seriously injured.

Dr. Garstang at once communicated with Dr. W. B. Craig, veterinarian. Both leaped into the buggy and hurried to the Massachusetts avenue station, to which point the car containing the ostriches was taken from Brightwood. Dr. Craig was accompanied by Maurice Lynch, his driver, wherein he was lucky, as Maurice is a wrestler and boxer of no little consequence.

When the doctors entered the car they found it full of ostriches, whose

long necks were as high as the roof and as low as the floor. Dr. Craig, who is almost as big as an ostrich himself, faced the largest group, containing nine. A big black ostrich darted out his head and tried to seize the doctor's Scottish Rite pin. Another cleverly pulled off a suspender buckle from an inquiring laborer who had intruded into the car. He fled. The injured ostrich was bleeding from a long wound in its neck.

Dr. Craig understood at a glance what was to be done. The wound must be treated with antiseptics and sewed up. The sewing, he said, would be like sewing a bootleg. But how to do this was a question. He appealed to the two men who had charge of the ostriches. Carl Kirkham, the keeper, said the only way was to get men enough to hold the ostrich. There was himself and his assistant, Fred White. They were about half enough. The doctor turned to Lynch.

"Here's your staff engagement on the mat," he said.

Lynch said naught, but rolled up his sleeves. The box car was pulled alongside an empty car and a gangway constructed. A toss this the ostrich was forced with some difficulty. The chief danger, Kirkham explained, was that injury makes an ostrich ferocious, and a blow from his foot is like the knock-out blow of a mule. The keeper got the bird by its mighty wings and Lynch got a hammerlock hold.

There was a struggle, much grunting and a few expletives not usually printed, says the Indianapolis News, and then down went the ostrich. Lynch changed his hold and got a half-Neison and a foot hold. The big bird tried vainly to rise again, but Lynch and the keepers had him fowl.

Dr. Craig washed the wounds with antiseptics and took twenty stitches on each side. The injury was probably caused by a splinter and may be fatal. The neck was not banded, but was plastered with antiseptic dressing. Then the ostrich was allowed to rise and Lynch took a long breath.

"Shake," he said. "I have no hard feelings."

The big bird wheeled and lifted up its foot. It set it down alongside Lynch's trousers leg went, too. His leg was also scratched, but not seriously. Lynch received a new pair, with the compliments of the Big Four.

The fifteen ostriches belong to Thom as A. Cockburn of Hot Springs, Ark. They have been exhibited in the East and were re-shipped to Mr. Cockburn's Arkansas ostrich farm from Long Branch, N. J. They are valued at \$1,500 each. Several present got real ostrich feathers while the wrestling match between Lynch and the bird was in progress.

## DE WET'S AUDACITY.

Boer Commander, Single-Handed, Captured a British Wagon Train.

Stories of De Wet, the dashing commander of the Boers, are nearly all interesting. Capt. Reichmann, in the Journal of the Military Service Institution, gives a striking illustration of the general's coolness and audacity:

The wagon-train was slowly couling on under clouds of dust, and not a single patrol or scout preceded it. So far as my observations went, there were no soldiers with the first six or eight wagons, which were of the lighter kind, contained the baggage, and were somewhat in advance of the others.

At last the heavy wagons were approaching, drawn by from eight to twelve mules each, and on most of the wagons sat one or more soldiers, facing to the rear to watch events there, and wholly unconscious of their danger. Gen. De Wet stood up in plain view, and called and beckoned to the British soldiers to "come in."

They were taken entirely by surprise, and came in, and were put away in a safe place under a high bank north of the crossing. As the wagons approached, one after another, the General called to the soldiers to "come in," and directed the wagons to pull to the right or left of the road.

It seemed as if De Wet were going to capture single-handed the entire train, and I can still see him standing there in the road, with his rifle at an order in his right hand, and his left hand in the air, beckoning "come in."

Not a shot was fired and everybody kept concealed. The thing went on for fifteen minutes or more, and soon there was a considerable number of wagons at the crossing lying helplessly under the rifles of the Boers; the number of prisoners under the bank of the creek was increasing rapidly, and the string of wagons still coming on extended all the way back to the British camp.

Considering concealment no longer necessary, we stood up, walked over to the prisoners, and took some snap shots of them.

Oftenest lame on the left side. Eighty-five per cent of the people who are lame are affected on the left side.

It is one pitiful sign of approaching age when a man begins to show preference in giving employment to the old and incompetent, rather than to young or men.

# NEWS OF THE PACIFIC NORTHWEST

A Good Week's Record of Commercial and Industrial Progress and Development in Oregon, Idaho, Washington and California.

## A Future Pittsburg.

Development work is now being done on what may prove to be the most important mineral properties in the State of Washington so far as adding to the state's commercial and industrial supremacy is concerned. These are locations of coal and iron mines located in adjacent and overlapping claims on the divide between Cowlitz and Lewis counties and about sixty miles, southwest of Yakima. The properties consist of some 700 or 800 acres of coal lands located under the coal land laws and a large number of iron claims located under the laws governing mineral locations. These claims are the property of Yakima business men and the work of developing them on a small scale is going slowly forward on the properties.

Two Spokane capitalists recently visited North Yakima for the purpose of purchasing or bonding the properties with a view of installing development work on a much larger scale and eventually building upon the properties a vast productive industry in mining and smelting iron ore.

The importance of a discovery of iron ore in this state has long been recognized by men who have made a study of the commercial progress and development of the world and many have been the efforts to find iron in sufficient quantity and of sufficient quality to justify mining and smelting it. As yet none of the reported discoveries has proven sufficiently promising to justify the expenditure at this time of the large sum of money it would require in order to properly develop the industry on a scale commensurate with its importance. Several promising iron locations have been made but little or no development is being done on any of them except as is necessary in order to make the locations valid from year to year.

The feature of these properties which makes them seem particularly promising is the fact that the coal and iron deposits are so near to each other, thus permitting the former to be used for the purpose of smelting the latter without the necessity and cost of transporting it. The coal is claimed to be an excellent grade of anthracite, the first discovery of that variety to be reported in the state, while the iron ore is very fine and of high grade in addition to being in such a form and in such a condition as to be easily and economically reducible.

## Scenic Attraction to Pull Trains.

The Great Northern is preparing to investigate the possibility of utilizing Snoqualmie Falls, the greatest scenic attraction in the State of Washington, for pulling its trains between Seattle and the summit of the Cascade range.

The Northern Pacific road is also considering the falls as a source of power for running its trains from Portland and Seattle to the summit of the Cascades.

President Hill has decided that electricity shall be the motive power through the Cascade tunnel, and if feasible, from the summit of the Cascades to the western terminals.

The falls have a total of 100,000 horsepower. Only 10,000 of this is now in use. The falls are 280 feet high and at present they supply the power for the street railways, flouring mills and factories of Seattle.

## Autos as Stage Coaches.

In remote Harney and Malheur counties automobiles are taking the place of the old-fashioned stage in the long runs into the interior. Two autos will shortly be purchased to make the 160 mile stage trip between Ontario, Malheur County, and Burns, county seat of Harney. Here a lumbering stage makes the run in 38 hours, delaying the mail of Burns business men and residents. P. A. Snyder, an Ontario business man, will have two automobiles on this arid route shortly, which he calculates can make a daylight run in 11 hours.

Out of Pendleton, a long weary run over hills and mountains through Pilot Rock, Nye Ridge and Alpa to Ukiah, a distance of 50 miles. The route is considered practicable for an automobile, but the scheme will not be pushed locally until the outcome of the Burns Ontario experiment is seen.

## Idaho Mines Active.

The owners of the Thunder Mountain mines near Boise, Idaho, have ordered a 100-stamp mill to be delivered next spring. It will be one of the most completely equipped mills in the west. The 10-stamp mill sent in this fall will begin work in a few days. The last news from the mine is to the effect that it was about ready to be started up.

## A Million-Dollar Company.

The Cascade Coal-Mining Company filed articles of incorporation here this afternoon. The incorporators are J. M. Wilhelm, H. E. Wilhelm and J. R. Campbell. The stock is \$1,000,000. Shares are worth \$1. The company has a coal prospect on Mr. Wilhelm's place east of Creswell, which has been worked for several years.

## An Important Railroad Enterprise.

The most important railroad enterprise since the building of the Southern Pacific Railroad through Southern Oregon, was the commencement on November 14, of the work on the Sugar Pine Lumber Company's Railroad from a point two miles south of Klamath Station to the timberland holdings of the same company at Pokogama, Ore., a distance of 30 miles by the route. The work is being prosecuted vigorously, and by next July or sooner the cars will be running and carrying passengers and freight.

It will be a standard-gauge road with 60-pound rails. The cost of construction will be \$20,000 per mile. There will be only one bridge, which will span the Klamath River about two miles from Jeany Creek. The end of the present construction is in the heart of the company's 70,000 acres of timberland holdings and will also bring the road over the high grades into the Klamath Basin land and will allow them to make Pokogama the freight-shipping point for Klamath County, and a wide range of Eastern Oregon. As a starter and for the principal motive the road is built to haul logs from their timber district to the connection with the Southern Pacific line, and 100 logging cars have been arranged for, as well as other rolling stock.

The Sugar Pine Company has secured 1500 acres of land two miles south of Klamath, and will erect thereon an immense two-set sawmill and will manufacture lumber of all kinds, sash, doors, boxing, etc., making one of the most up-to-date outfits on the Coast. They will lay out a townsite and establish a small city at that place.

## Pacific's Trade Supreme.

A writer in the Monthly Review sometime ago drew attention to the statement that supremacy in trade was passing from the Atlantic to the Pacific ocean, at least that the relative importance of the latter was sure to increase. A writer in the New York World points out that there are 800,000,000 people in Asia, Africa, Australia and the Pacific archipelagoes, and his expectation is that the American countries will obtain the larger share of their trade. So far as China, Japan and Asiatic Russia are concerned the United States and Canada are certainly in an advantageous position for trade, the route across the Pacific being better than any of those available for European countries.

Half the steam merchant vessels now under construction in the United States are for the Pacific, and attempts are being made to shorten the voyage by the building of very powerful vessels. The development of China will be one of the most important elements in the trade of the Pacific. If Chinamen were to increase their consumption of foreign goods to the extent of \$5 a head, the amount would be nearly as great as the whole of the present trade of the United States.

## California Lemons Are the Best.

At the request of the Earl Fruit Company, Messrs. Stillwell and Gladding, chemists to the New York Produce Exchange, have made an analysis of this year's California lemon crop. It is almost a year since a similar analysis was made, showing the comparative merits of California and Italian lemons, the result being much discussed on account of the favorable showing made by the California product. The growers in California have been making every effort to bring their fruit to a still higher degree of perfection, by scientific methods of cultivation, and, as compared with the test made last November, this year's analysis is even more favorable.

The percentage of waste matter, consisting of pulp, seeds and rind last year was 64 per cent; this year it is 53.65 per cent, according to the last analysis. The percentage of juice was 36 per cent. The citric acid, equivalent to crystallized citric acid last year was 8.23 ounces per United States wine gallon; this year it is 9.21 ounces per United States wine gallon.

## New Source of Western Wealth.

A large number of inquiries from various parts of the state have been received at the State Agricultural College of Oregon, of the progress of an experiment conducted by the college experiment station for the manufacture of vinegar from refuse prunes. The character and number of the inquiries indicate that much interest is aroused in the experiment. The inquiries generally seek information concerning methods and steps necessary in securing fermentation, acetic acid and other matters connected with vinegar-making.

An analysis yesterday of the prune juice, now but a month along in the three or four months of process necessary to secure final results, shows an acetic acid content of 2.16 per cent, a far greater per cent than Professor Pernot expected. It is now believed that the ultimate acetic acid content will be greater than is usually secured in pure elder vinegar.

## LATE NEWS ITEMS.

James Alvord, the famous outlaw who assisted in the Coche and Fairbanks robbery on the Southern Pacific has been killed while trying to hold up a messenger with the payroll of the Sonora Mining company at Tubutama, Sonora.

Canvassers for subscriptions to the Lewis and Clark centennial which it is proposed to hold in Portland in 1905, started out, and it is understood that practically the entire capital stock of the corporation, \$300,000 is assured as the result of a single day's work.

Lying against the shore at Mount Vernon, with his coat pockets filled with stones, the body of Alexander D. Anderson, a well known Washington lawyer and commissioner to the Chicago world's fair, was found. Mr. Anderson left a note for his family, bidding them adieu, saying he was going to end his suffering of many years from stomach troubles.

Earlington, Ky., Nov. 26.—True to their threat to maintain the camp at Nortonville, the union miners erected another tent on the site of the camp which Judge Hall broke up only the day before. At that time the leaders, Rodney and Reed, who were at Nortonville, were not arrested, and Artie Oats, who had command of the camp, escaped after arrest. The renewal of the camp was a great surprise.

United States Commissioner Dineen was recently burned in effigy by an assembly of people at Roff, Indian Territory, and vicinity. This action was caused by Dineen dismissing a colored prisoner, Jeff Walker, who severely stabbed a white man, W. L. Robertson, of Roff, last Saturday.

The annual report of Secretary of Agriculture Wilson tells of the vast growth of all branches of the department's work. An extension of the weather forecast to farmers through the rural free delivery is contemplated. Wireless telegraphy will soon connect the Tatoosh Island, Washington, with the mainland.

Washington supreme court holds that owner of delinquent tax certificate for general taxes does not have to pay street grade assessments before foreclosing his lien.

A cut rate war has begun between the several Seattle and San Francisco steamship lines.

The divorce suit brought by David Nation against his wife, Carrie Nation, was begun in Kansas today. Mr. Nation claims his wife took away his feather bed, drew \$900 from the bank and refused to live with him. Mrs. Nation will have her innings tomorrow.

Manila, Nov. 27.—Second Lieutenant Louis J. Van Schack, of the Fourth Infantry, while scouting with a few men of that regiment, met 150 insurgents who had attacked and sacked the hamlet of Blaraca, near Cavite. Upon seeing the Filipinos, Van Schack ordered his men to charge them. The command was obeyed and Van Schack, being mounted, reached the insurgents 60 yards in advance of his men. He killed three of them with his revolver. An insurgent fired his rifle point blank at Van Schack at four paces, but missed. Lieutenant Van Schack was then knocked from his horse. He then jumped to his feet and engaged in a hand to hand conflict with the enemy, using the butt of his revolver. He sustained two severe wounds, one of which nearly severed his wrist. At this point the lieutenant's men arrived, rescued him and put the insurgent to flight. Van Schack is in the military hospital at Manila and is doing well. He has already been recommended for a medal of honor for bravery in a previous engagement.

General Hughes, commander of the department of the Visayas, reports that negotiations are about completed for the surrender of the insurgent leader Samson on Bohol Island. "This surrender will doubtless end the revolt of the American authority in Bohol, as Samson is acknowledged to be the best insurgent leader there."

Ants have been burrowing under the brick pavements of Council Bluffs, Ia., and removing the sand. One street for a distance of several blocks has thus been rendered unfit for travel.

The Lamas of Tibet, in some of their religious ceremonies, use drums which are made by stretching snake skins over the craniums of human skulls.

H. C. Thurston, who was the tallest man in the Confederate army, is still living in Mount Vernon, Tex. Although 7 feet 7 1/2 inches tall, and naturally a mark for sharpshooters, he was wounded only once in all the campaigns.

Rev. J. K. Smith, of Louisville, Ky., declares that city, with a population of 200,000, has more murders than London with 7,000,000.

An industrious necker of the curious has discovered that President Roosevelt is the first occupant of the White House in whose name the letter "A" does not appear.

# UNCLE SAM TAKING A HAND

## ISTHMIAN TRANSIT DELAY.

Battleship Iowa Is There With Detachment of Men to Protect American Interests—Town of Colon Was Not Bombarded—The Government Claims Victory.

Washington, Nov. 26.—The United States government has taken charge of the isthmiian transit. A dispatch received at the navy department from Captain Perry of the battleship Iowa at Panama reports that fact. Captain Perry says that General Alban, with 600 men, is fighting the liberals on the line near Empire station. Transit is in danger of interruption. Captain Perry has landed with a detachment of men from the Iowa and has started with a train to clear transit and also establish detachments of men to keep it so.

Commander McCrea of the Machias, at Colon, has cabled the navy department notifying the department of the approaching bombardment of the town and asking for instructions. He has been instructed to take such steps as he deems necessary for the protection of American interests at Colon. While no specific statement is made as to the details of this instruction, it is understood it leaves discretionary with Commander McCrea the prevention of a bombardment.

Mr. Herrera, in charge of the affairs of the Colombian legation, received the following telegram:

## Rebels Defeated.

"Panama, Nov. 26.—Colombian Minister, Washington: The rebel army was completely defeated at Culebra and Emporado. The governor marched last night upon Colon. Traffic was interrupted yesterday, but will be reestablished today."

The action taken by the United States in landing marines, and protecting the line across the isthmus, is in conformity with the wishes of the Colombian government, and follows a specific request recently made by Mr. Herrera. The Colombian authorities are fully aware that if they re-take Colon it must be through their own efforts and without the hope of any assistance from the American forces on the ground, as this government is scrupulously holding aloof from the political contest between the government and the liberals. The commotion in the streets as this dispatch is sent is ended and calm now reigns. The liberal army is reported to have been defeated at Matadin by General Alban's command. The latter is said to be pushing on Colon.

At a conference held at 11 o'clock this morning on board the British cruiser Tribune, at which General Ignacio Falco, Senor de la Bosa, secretary of General Diaz, and the commanders of the foreign warships were present, the general agreed, at the request of the naval commanders and on the ground of humanity, having in view the large foreign population of Colon, not to land the troops here or open fire on the town before 6 o'clock Friday evening. The Colombian gunboat General Pinzon is badly off for provisions, and the commanders of all the warships agreed to supply her with the necessary stores. The gunboat has not returned to Colon, and her whereabouts is unknown.

## Were Fatally Burned.

Pittsburg, Nov. 26.—Four persons were burned to death and two seriously injured in a fire which destroyed the residence of J. G. Miller, on Charles street, Knoxville, a suburb of this city. The dead are: Rose Miller, aged 23, terribly burned, and died on the way to the hospital. Amelia Miller, aged 19 years, suffocated. Armanda Miller, aged 16 years, suffocated.

Sylvia Miller, aged 9, suffocated. The injured are J. G. Miller, the father, and Mrs. Miller. The two other daughters, aged 11 and 13 years, escaped without injuries.

## Three Deaths the Result.

Marietta, Ohio, Nov. 26.—At Unionville, Morgan county, Robert Wilking and wife had a family quarrel. Mrs. Wilking, taking her baby, hurried to the home of her father, Jacob Stokes. The husband followed. He shot and mortally wounded Mr. and Mrs. Stokes, who were on the veranda of the house. A son of Mr. Stokes then shot and killed Wilking.

## His Conscience Guilt Him.

Washington, Nov. 26.—Secretary Hay has received from an unknown person, through the collector of customs at New York, a conscience contribution of \$10,000.

## William Gwynn Dead.

Washington, Nov. 26.—William Gwynn, for 30 years chief messenger to the secretary of state, died last night from a chronic stomach complaint.

Will Mathis, who is charged with the murder of two deputy marshals, Montgomery by name, walked into the little town of Dallas, twelve miles south of Oxford, Miss., and surrendered to a justice of the peace and the citizens. Mathis had been closely pursued by a large posse with shotguns and revolvers, and, realizing that his chance was certain, the fugitive voluntarily gave himself up and asked for protection.