

A Chinese Legend.

How the Princess Louit-Sou Fed the Strange Worms and the Emperor Hoang-Ti Taught the Chinese to Make the First Silken Fabrics.

It was a beautiful spring morning some 4,547 years ago. The sun had melted away the snow from the fields and meadows, and a carpet of sappy green and brilliant colored flowers covered the ground. Some of the trees were already replete with their new coats of large light-green leaves, while others, like the mulberry, had been afraid of the treacherous night frosts and had only just begun to sprout out the first delicate leaves. Above this budding world and visible everywhere through the tiny foliage the sky shone in dancing azure, a few white feathery clouds drifting slowly before a light breeze.

In the center of the large park of which we speak above—we are not relating a fairy tale, but a true story—there stood a magnificent, brilliant palace. The golden roof, in front of which fierce, graybearded warriors stood on sentry duty, was opened wide and through it came Hoang-Ti, the emperor of China, accompanied by his little daughter, Louit-Sou, and followed by his mandarins and many officers of his household. He wore a superb garment made of panther skins and was in excellent humor, for he had just received good tidings from his counselors and various affairs of state and meant to refresh himself after the morning's work by a walk in the new green of the park.

As they proceeded through the long rows of budding mulberry trees leading from the palace to the bank of the river the little princess suddenly halted in front of a young mulberry shoot, standing close by one of the older trees. Under this latter's protection its leaves had sprouted somewhat faster and, as it seemed, Princess Louit-Sou had made a discovery about the shrub, which consumed her entire interest. The emperor also approached and remained captivated by the old spectacle offering itself to his eyes. There were hundreds of tiny black worms that had just escaped from their eggs and were now industriously crawling along the twigs and branches in quest of nourishment. The little princess enjoyed herself as only children can who have received a new toy and the emperor ordered the entire shrub to be carefully transplanted into a magnificent vase and placed in the room of his daughter.

Princess Louit-Sou followed with ever-increasing interest the progress of her new wards and had them provided with fresh leaves when those upon the shrub had been

for the curious little animals was now thoroughly aroused. He not only watched them while they spun themselves in until the last one had completed its shining cocoon, but he also raked his brains and puzzled about what would now become of them. One day a few weeks later he found the reply to his burning question. He fancied he could hear a slight noise within one of the egg-shaped formations. As he bent down to examine it more closely, he saw that it had discolored at one end and apparently had become moist; how this end, bulged outward; how the outer threads were gently pushed to one side and how some tiny white feet made their appearance, soon followed by a little white head. A small, trembling, white animal crept forth, its wings grew and strengthened noticeably after being opened and about a few times until it suddenly flew away. The emperor, the empress and the little princess were very much surprised. They all had often seen the little white butterfly in swarms about the old mulberry trees in the garden, particularly in the twilight of a warm summer evening. It was not long before the little princess had a lot of these butterflies in her room, who did not take kindly to this new whim of their mistress.

But Louit-Sou was a child and a princess at that. So she insisted upon being allowed to feed her new pets, just as she had formerly fed the much less jolly caterpillars; but at first she was very unhappy that her butterflies would not eat the fresh mulberry leaves she had brought in for them every day; still they would always keep near the boughs placed in the room. Shortly after the clever child made another discovery. She found upon the boughs tiny globules and remembered having seen similar ones upon the branch that had been brought first from the garden. She apprised her parents of the news and between them they soon found the truth. They had discovered the transitory forms of the development of the silk-worm.

Since that time Emperor Hoang-Ti was often seen in deep thought. Whenever he found the empress at her loom he would remain at her side for hours watching her quick hands guiding the shuttle through the

fiber procured by the machine of the emperor from the cocoons. The monarch had thus become the founder of the silk industry. Soon he also taught the art of dying the silk in various colors by means of vegetable dyestuffs. The first silk fabric that came from the loom of the empress was worked into a garment for the little princess, Louit-Sou, who was radiant in the dazzling yellow-white dress, but the very next was a handsome, shining gown for the emperor, in blue—the color of the sky—and yellow—the color of the earth—in memory of the beautiful spring morning when the emperor in the light of a radiant sky had discovered on earth wherewith to make his people wealthy and happy.

Long ere grim death put an end to the glorious reign of Emperor Hoang-Ti many thousands of industrious workmen were engaged in the newly created manufacture of silk. When the entire people through deluge wars wanted to thank the emperor for giving his valuable discovery to the nation the modest monarch disclaimed all merit and only said that he had thought "a novel occupation would be the most adequate means to raise the moral standard of his people and to combat poverty."

After the death of Emperor Hoang-Ti the people rose as a man to erect a monument to his memory such as no mortal had ever received. But then there appeared an old anchorite, who had for many years lodged in the mountains in deep seclusion and exhausted all earthly wisdom. "Would you," said he to the people, "erect to the man who was more modest than the meanest among you, a monument made of iron? Very well, then, do so if you think it will satisfy your sense of gratitude. But it would be far more beautiful if you could succeed in setting an everlasting monument to Emperor Hoang-Ti in the memory of our entire nation. Teach your children to look up in clear nights to the starry heavens above, and to couple with the brightest of the stars the memory of the great emperor and with the hardly less brilliant star next to it the thought of his noble wife. Let that pious devotion pass on to your children, and to your children's children indefinitely."

And so it happened. Thousands of years have since gone by. We know not whether the great Emperor Hoang-Ti ever had a metal monument erected to his memory nor where it once stood. But when night now where it once stood. But when night in the Flower Kingdom and star upon star flashes up in the sky, then the little Chinese children come out of their houses. They turn up their eager faces and search among the stars until they have found what they were looking for, and then they joyfully exclaim: "Tsan-Fang, the little silk house!" And then they think of the great Em-

THE FIELD OF ELECTRICITY

Pushing Electric Lines Penetrating the Preserves of Steam Roads.

INDICATIONS OF "MANIFEST DESTINY"

Suggestions for Greater Safety of Ocean Travel—Electric Railroads in Europe—Other Developments.

An indication of what electricians call "manifest destiny" is given in the report that electricity is to supplant steam as the power on the cog road that climbs the rugged alps to the Peak. This is but one of the many symptoms of the change going on gradually. The electric trolley lines are carrying a very appreciable proportion of the suburban passenger traffic that belongs entirely to the railroads which run by steam. This is more noticeable in the east than in the west. The Western Electrician makes a statistical comparison which is very striking. In the ten years up to and including 1893 the number of passengers carried on the steam railroads in Massachusetts increased at the rate of 5,825,000 a year. The next four years they decreased at the rate of 4,766,000 a year. The decrease in passenger journeys from 1893 to 1897 was more than 10,000,000, or 15.65 per cent. While the number of journeys fell off only 6.66 per cent, showing that the average journey grew in length nearly 12 per cent. There are six steam railroads entering Boston. These lost 12.2 per cent of their passengers from 1893 to 1897. The electric street railroads that enter Boston, and these gained in the same four years 31.2 per cent in the number of passengers carried. The lower fare charged by the electric lines helps to get the business, but in many cases the inducement of open air and no dust or cinders is of itself a strong one in hot weather.

Safety in Ocean Travel.

The wreck of La Bourdonne in a fog near Sable Island, in which 163 lives were lost, has brought out a lot of suggestions for carrying vessels when in close proximity to one another. The original suggestion is that of dispelling a fog by means of electrical discharges. Mr. Alexander McAdie in a recent contribution to the North American Review has proposed some such method, and gives his reasons for so doing. At the outset he states that air at sea level at a temperature of 80 degrees Fahrenheit, half filled with moisture, has eleven grams of water vapor to each kilogram of air. If the temperature is lowered, say to 60 degrees, through a change in the pressure, the air will become saturated with water vapor, or in other words, will have all it can hold. Mr. McAdie then goes on to say: "If the mixed air and vapor can be lifted about 1000 feet, the rain engineer can ordinarily form a cloud or fog. Conversely, if he can increase the pressure and supply the requisite amount of heat, he can alter conditions so that no fog forms, or if it has formed, it will disappear." Provided we can control the thermo-dynamic conditions, we can condense the invisible vapor of the air into visible cloud, and on the other hand, change the visible fog into invisible vapor." In Mr. McAdie's opinion this desired result might be accomplished by means of such discharges as that of dispelling a fog by means of electrical discharges. Experiments were also carried on in a room filled with thick turpentine smoke, it being definitely shown that the air could be speedily cleaned of its solid particles by discharges of electricity at a high potential.

In 1887 Prof. Lodge, while enroute to this country, was detained for several hours by a very thick fog, regarding which he subsequently wrote as follows: "Fog is an unmitigated nuisance. Electric light is powerless to penetrate it, and as we lay there, it is impossible not to be struck with the advisability of dissipating it. It is rash to predict what can be done. It is still rasher to predict what cannot be done. I would merely point out that one looking at the matter from the point of view of the fog, which frequently gathers in towns and cities. He stated that he had found that a bell jar filled with magnesium smoke or with steam could readily be cleared by an electric discharge. Experiments were also carried on in a room filled with thick turpentine smoke, it being definitely shown that the air could be speedily cleaned of its solid particles by discharges of electricity at a high potential.

Europe's Electric Railways.

On January 1, 1898, 204 lines of electric street railways, with a mileage of 1422 miles, were in operation in Europe. The rolling stock consisted of 4,511 motor cars. The following table shows the status of these lines in the different countries of Europe:

Country	Length	Motor Cars
Germany	707.2	2,493
Austria-Hungary	107.3	352
Great Britain	97.6	252
Switzerland	90.8	227
France	82.7	217
Austria-Hungary	66.1	243
Belgium	42.8	107
Spain	37.9	99
Russia	19.9	65
Denmark	12.2	31
Serbia	6.2	11
Bosnia	3.5	10
Portugal	1.7	3
Total	1,422.5	4,511

Germany has sixty-five, France forty-four, Austria-Hungary thirty-three, Great Britain twenty-four, Switzerland twenty-three and Italy eleven electric railways. The system most in use is the overhead trolley, which is operated by 172 lines, while eight lines have adopted the underground trolley, eight lines the third-rail system, thirteen lines storage or accumulator cars, and three lines have a mixed system of overhead trolley and accumulators at certain points on their lines. There would seem to be two notable facts developed in these figures: First, that Germany is far and away in advance of other countries, eclipsing France, with her large city population and numerous electric departments, and railway construction. Again, little Switzerland is

To our Out-of-town patrons

How to save a lot of money

As we have had a host of requests from Bee subscribers, who cannot take advantage of our excursion, Sept. 21 and 22, because this time the excursion includes the B. & M. R. R. only, and they live in towns not on the B. & M., we have yielded to the demand and made

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We have issued a coupon ticket which will admit the holder to the exposition grounds; to the following shows on the Midway:

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- 3—Pabst on the Midway.
- 4—The Streets of Cairo and Theatre.
- 5—The Flying Lady.
- 6—The Bombardment of Manila.
- 7—The German Village.
- 8—The Scenic Railway and Battle of Manila.
- 9—Shooting the Chutes.
- 10—The Palace of Mysteries.

and will also obtain a special discount on hotel rates at the Dellone, Arcade or Saratoga hotels.

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Whether you are a subscriber now or not fill out the blank above. If you take or wish to take the paper through an agent, fill in his name in the place marked X, otherwise insert the word "mail." Place the name of the town where you live at the top and sign your name at the bottom, and you can get your tickets at the above price, by calling at The

BEE OFFICE
Bee Building, Omaha.

Or, for \$2.00 we will send you a coupon ticket as above and WEEKLY BEE for one year.



THE YOUNG PRINCESS SUDDENLY HALTED IN FRONT OF A YOUNG MULBERRY SHOOT.

seen up by the hungry crowd. Luckily there was no lack of mulberry leaves in the garden of the palace. The princess never tired in observing how the tiny worms grew and grew and how their color gradually changed from black into milk-white. Often she would call in her mother, Empress Te-Ling-shi, so that she too might share her pleasure in observing the cute little pets feeding on fresh leaves and growing all most from day to day. One day, however, Louit-Sou perceived something so extraordinary that she was unable to master her excitement and did something she was strictly forbidden to do. She rushed into her father's privy council chamber.

Without even noticing the amazement of the old premier minister, who had been about to submit his report on state matters of grave importance to the emperor, the little princess harassed and begged her father to come and see the wonderful things she had to show him, until he gave in and followed the impulsive little girl.

Some of the caterpillars, now grown long and thick, sat among the mulberry twigs, which they had despoiled of their leaves, within a fabric of shining yellowish threads. Zealously they kept moving their little heads to and fro and the sharp-sighted emperor noticed that the fine threads issued from their mouths. This thread they kept on winding about themselves, turning a little further at every move, and before the very eyes of the emperor the fine veils first enclosing the caterpillars, became thicker and closer, until finally the industrious worms were completely hidden from view. The emperor turned to his wife, who had come to see the unusual sight, leaving her loom, at which she had been working.

"They are industrious little creatures," said the emperor; "they follow your example and weave a beautiful garment for themselves."

war. It went so far that while looking at the emperor's work he would sometimes neglect even urgent state affairs. "Just think of it," said the master of the household to the minister of war one day. "His majesty has not listened to me or heard one word of my verbal report to what measures I propose to employ to stop the damage done by the caterpillars in the imperial gardens. He would have ample time for at least 150 people if the emperor had sanctioned my plan and approved of the creation of the new charge of 'imperial caterpillar destroyer.' I even had imagined most handsome uniforms for these very useful officials."

"Oh, yes, you are quite right, my dear friend," retorted the minister of war, "his majesty certainly lacks the mental vigor of former days. While I read my report on the state of our northern fortifications yesterday the emperor played the whole time with one of the little egg-shaped balls made by the worms of the little princess, and when I had finished he had it pulled to pieces and into numberless fine threads."

The two old courtiers shook their gray heads in dismay and went on their respective errands. Their astonishment about the whims of their imperial master rose higher still when in the following spring Emperor Hoang-Ti gave orders to collect all the worms that could be found on the mulberry trees and had them fed and cared for in the largest state halls of his sumptuous palace. The empress and the princess supervised this work in person and never a day passed without the emperor himself inspecting the progress of his hobby. When the worms ceased feeding on leaves and began spinning their cocoons the emperor came forward with a little machine, which made it possible to unwind the fine threads from the cocoons and to turn them into a yarn of a fineness previously unknown. When a sufficient quantity of the yarn had been obtained the princess again turned to her loom and what she wove then was not wool, but the new

per Hoang-Ti, who more than forty-five centuries ago understood the art to observe Nature's own forces at work and to make use of what he learned for the benefit of his people.

*Tsan-Fang, the name for four of the brightest stars in the constellation of the Scorpion.

PENSIONS FOR WESTERN VETERANS.

Survivors of Civil War Remembered by the General Government.

WASHINGTON, Sept. 20.—(Special.)—Pensions have been issued to the following: Issue of September 7.
Nebraska—Original: John Price, Tekamah, \$8. Renewal: Henry M. Brooks, Seward, \$8. Increase: George F. Warren, Harvard, \$6 to \$12; Edward O. Lemmon, Geneva, \$10 to \$12.
Iowa—Renewal and increase: Elias Rucker, Villisca, \$6 to \$8. Increase: Jacob Rogers, Council Bluffs, \$6 to \$8. Release and increase: John Staver, Wankee, \$6 to \$8. Original widows etc.: Special September 9, Emma A. Glover, Spirit Lake, \$8.

President Makes No Political Speech.

CHICAGO, Sept. 20.—The Post's Washington special says: The president has decided against appeals which have been made to him to make political speeches in Ohio and Indiana, or anywhere else during the campaign. He gave Representatives Overstreet and Paris to understand today that on his way to Omaha he would make stops at Indianapolis and Terre Haute, but not to make speeches. On his way back he may make two or three similar stops in Ohio, but on none of these occasions will there be political speechmaking by the executive.

For broken surfaces, sores, insect bites, burns, skin diseases, and especially itching, there is one reliable remedy, DeWitt's Witch Hazel Salve. When you call for DeWitt's don't accept counterfeit or frauds. You will not be disappointed with DeWitt's Witch Hazel Salve.

Electric Mail System.

During the last few weeks a very interesting series of tests have been carried on at Jersey City Heights with a model car or carrier invented by J. H. McGurty of Jersey City, says the Electrical Engineer. For this purpose a circular track one-quarter of a mile in length has been constructed at the foot of Central and Manhattan avenues, and around this track the miniature car speeds at a marvelous rate, fulfilling the expectations of the inventor and his friends, as well as suggesting the possibility of a commercially successful system of electric express service. The system invented by Mr. McGurty is for the purpose of carrying mail, newspapers and general express material at a high rate of speed, embodying devices to have the car stop at any desired station and doing away with an attendant on the car. To accomplish these desired features Mr. McGurty has invented several new and interesting devices, such as automatic controllers, a novel trolley, insulated sections and brake, all of which will be referred to later on.

It is proposed to run the cars at a speed of 120 miles per hour, but the model car shown in the illustrations, which is box-shaped and pointed at one end, is five feet long, three feet high and two feet wide and weighs 300 pounds, will not run at this speed. It does, however, with six-inch wheels, attain a speed of eighteen miles per hour on this "continuous curve" track. The practical car will probably be thirty feet in length and have a capacity of about 40,000 pounds.

The inventor, who has carefully worked out every detail of his scheme, claims as a new alternating current motor, one of which is mounted directly on the front and one on the rear axle of the car. On board of the car is an automatic rheostat for starting the car, there being no attendant, and this rheostat embodies a mechanism by means of which the car can be started as slowly or rapidly as is desired, bringing it up to speed in one or two minutes or even a fractional part of one minute. There is further provided an ingenious electric brake which goes into action as soon as the current is applied to it, and is released when the current is shut off. It can be so regulated by springs as to stop the car at a definite predetermined place and any desired time after the current is applied or shut off. An automatic controller is also placed on the car which reduces the speed of the car when turning corners or down grades, or when approaching stations.

Having now given a general description of the several devices employed by Mr. McGurty, a general idea of their employment by looking into the method of operation of the system is in order. The cars are sent away by a train dispatcher from one end of the line. He instructs the operator at the station where the car is to be stopped that the car has started on its journey and should be stopped at his station. The operator then throws his station switch, thereby cutting the current off from a section of track near the station. The car, arriving at the station, will find the track in this condition and will automatically have the brakes applied and stop at the appointed place. When it is again ready to proceed on its onward journey the operator opens his switch and the car is started,

Gas and Electric Motors.

A gas advocate concedes that the electric motor, as compared with the gas motor, presents a number of desirable features. It requires less room, is started and stopped in the most simple manner by a turn of the hand, requires very little outlay of attention or lubricants, and its first cost is much smaller than that of a gas engine. But he claims that when the question of economy of cost of operating and maintaining is considered, the advantage is all with the gas engine. He puts the saving in the use of the gas engine, for steady working, at not less than 50 per cent, even though the charges for electric current when applied to power purposes are greatly reduced from those for current for lighting, and he holds that when employed but half the time the gas engine will still effect a saving of 40 per cent. These deductions are drawn to a considerable extent from the conditions obtaining in Cologne, Germany, where gas and electric motors are working under conditions favorable to a fair comparison of the respective systems. In the comparative table it is assumed that both motors shall be run during ten hours each day for 300 days in the year, when at full work. Both machines are of the latest construction, and are of four-horse power. The gas engine requires 91.8 cubic feet of gas per hour, and the hourly absorption of current by the electric motor is 3.8 kilowatts. In each case interest on capital is reckoned at 4 per cent, and wear and tear is estimated at 7 per cent. The cost of the gas motor plant was 2,300 marks, or \$340.50, and it entailed a yearly expense, including interest, wear and tear, cost of gas, oil and waste, attendance and cleaning, of 1,250 marks, or \$187.50. The first cost of the electric motor was 1,400 marks, or \$210, and its yearly running expenses amounted to 2,750 marks, or \$412.50. The cost per horse power is thus seen to be 10.5 pence (10¢ to the mark) for the gas motor and 23 pence for the electric motor. When the motor wires were used only half the time the comparison was more favorable to the electric motor, but even then the gas economy was 46 per cent below that of the gas engine.

Electricity in Surgery.

Of late years America has gone far ahead of any country in developments in the application of electricity to medicine and surgery; but an extract from the presidential address of Dr. John Duncan to the British Medical association has interest in showing that the movement now in such active prosecution in this country was started many years ago. Dr. Duncan said: "The other improvement to which I venture to direct your attention is the introduction of electricity into the infirmary. For thirty years I have preached, in and out of season, the surgical uses of electrolysis, but I feel assured that even now it has not met with the appreciation it deserves. Yet in circumscribed cases it has been used with the most successful results. In cases of aneurism no other treatment can be compared with it for a moment. In cases of the usual mixed variety, if you desire to avoid a scar, there is nothing so sure and

WHAT THEY EXPECT.

Grievances of a Woman Claiming Equality with Man.

She was a new woman and was rather proud of the fact that she had a place in the world of business that enabled her to regard herself as being on an equality with man. But there was one thing that annoyed her, reports the Chicago Post.

"I go down on the car early every morning," she said, "with a young man who lives a little further out than I do, and I don't mind saying that he doesn't know what courtesy and gentleness is."
"What does he do?" inquired her big brother, who doesn't think very much of new women, anyway, and is consequently opposed to his sister being in the world of business.
"It isn't what he does," she replied; "it's what he doesn't do. Time and again he has let me stand up all the way downtown, when it would seem as if the very least he could have done was to get up and offer me his seat."
"That is wrong, isn't it?" returned the big brother.
"It's contemptible selfishness; that's what it is," she answered.
The fact that he is in possession of a seat," went on the big brother, "of course does not entitle him to it if a fellow clerk of the opposite sex happens to want it. And yet men of business will do those things. Why, I know a girl who has twice the grip-strength you have in that line."
"What's happened to her?" she asked.
"Man there first and refused to give up when she came along," he explained.
"Give up his seat?"
"No; give up his job. She has discovered that it would just about suit her, but the great big brute of a man hasn't chivalry and courtesy enough to get up from his desk, bow politely and say: 'Madam, permit me to offer you a seat.' Actually, he just hangs right on to it himself and lets her go hunting round for something to do. Most ungentlemanly, isn't it? But, do you know, I think the old-fashioned courtesy is—"

The Best Remedy for Flux.

Mr. John Mathias, a well known stock dealer of Pulaski, Ky., says: "After suffering for over a week with flux, and my physician having failed to relieve me, I was advised to try Chamberlain's Colic, Cholera and Diarrhoea Remedy, and have the pleasure of stating that the half of one bottle cured me."

Gas Explosion in Coal Mine.

YOUNGSTOWN, O., Sept. 20.—A gas explosion occurred in the Slope coal mine at Lisbon, thirty miles from here, last night. John Connelly was killed. The remainder of the night shift had narrow escapes. The mine is on fire half a mile from the entrance.

To Save Doctor's Bills

Use "Garland" Stoves and Ranges.