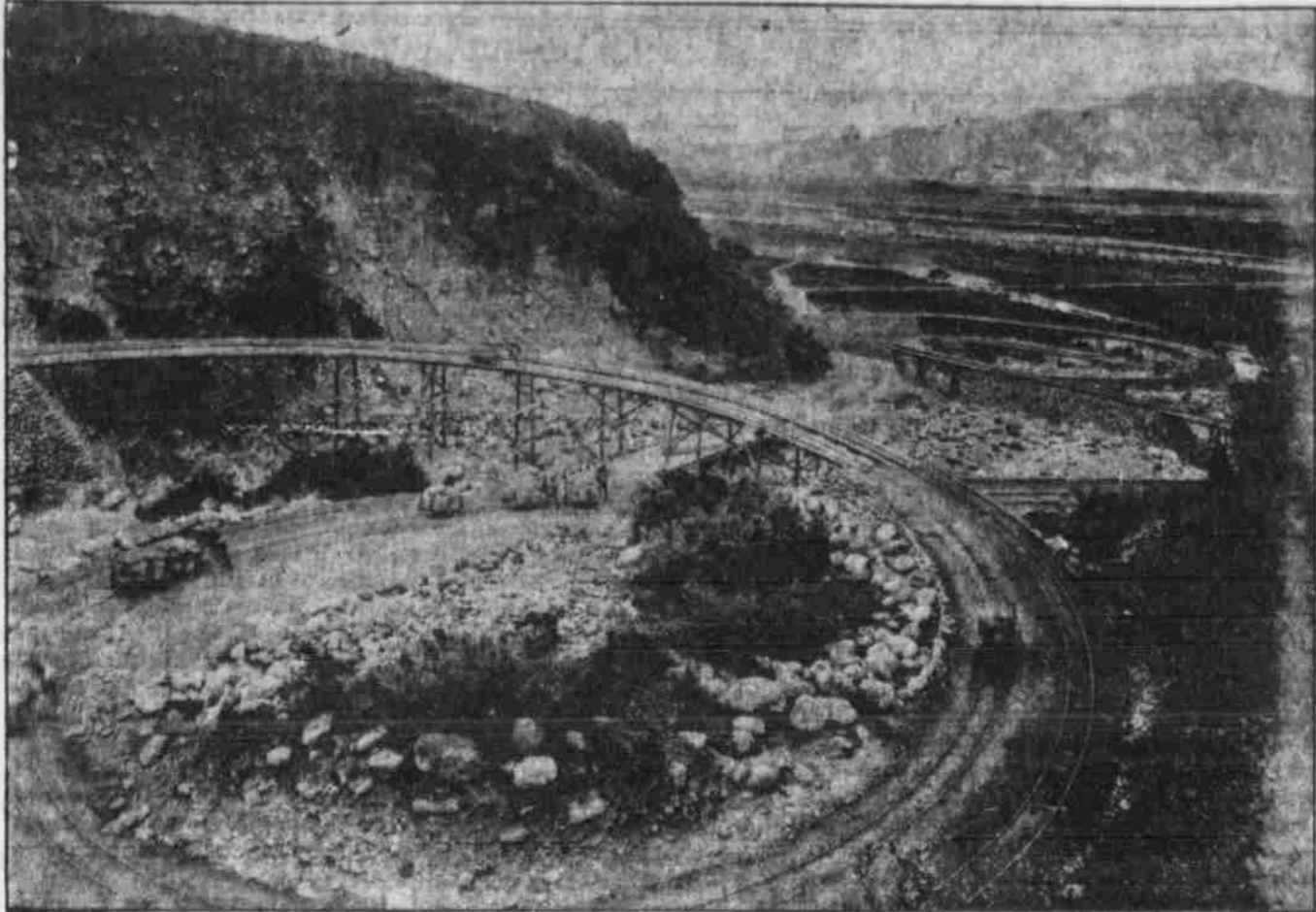


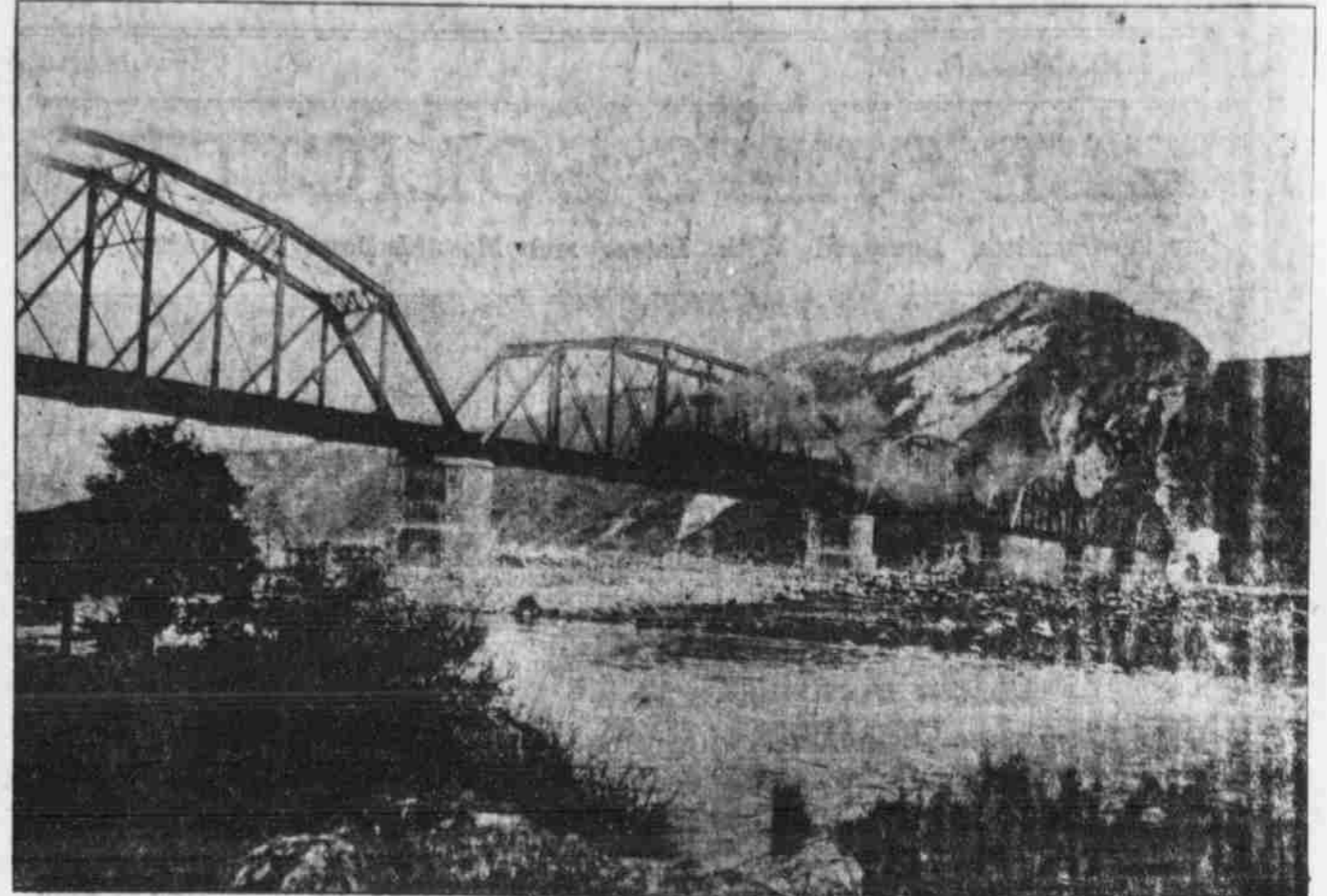
What Japan is Doing in the Way of Handing Its New Formosa Colony



FORMOSA VALLEY, SHOWING WINDINGS OF TEMPORARY TRACK.



BARON SHIMPEI GOTO



ONE OF THE NEW FORMOSA RAILWAY BRIDGES, PUT UP BY THE JAPANESE

(Copyright, 1909, by Frank G. Carpenter.)
 OKIO, 1909.—(Special Correspondence of The Bee.)—I want to tell you what the Japanese are doing in Formosa. Uncle Sam is much interested in that island, and Secretary Taft recently sent a commission of the War department to go through it and report to him with a view to improvements in our policy in managing the Philippines. Japan got Formosa at the close of its war with China, just about five years before the Philippines came to us. The island was then in the throes of rebellion, and it was looked upon as about the poorest piece of property in the far east. It had practically been offered to France and Great Britain and refused. Its inhabitants were thought to be only pirates and savage head hunters, mixed with the lowest grade of opium-smoking Chinese, and it was turbulent to an extreme. It was, if anything, in a worse condition than the Philippines when we took hold of them. After the island was ceded to the Japanese they had to fight their way from one end of it to the other to conquer it, and they kept a military establishment there for five or six years.

Formosa in 1909.
 At the same time they began to make improvements and to reorganize the country. The island was put under a civil administration within less than two years after its acquisition, and now, at the end of thirteen years, it is a fixed part of the Japanese empire, paying its own financial expenses and rapidly improving along the lines of modern civilization. In these latter of mine on the awakening of Asia it is thus fitting that at least one should be written on the awakening of Formosa. In order to tell you how this nation of savages and semi-barbarians has been quickened into modern life. I called this morning on Baron Shimpei Goto at his official residence near the Shintaiji railroad station here in Tokyo. Baron Goto is now one of the cabinet of the emperor. He is the minister of communications, and as such has charge of the railways, telegraphs, shipping and other transportation problems of Japan. It is now over ten years since he was made the civil governor of Formosa, and he says directly to him that that island has been so rapidly and efficiently reorganized and rejuvenated. He was for almost ten years in charge of its development, and no one can speak better as to its present situation and its future.

Province of Taiwan.
 During our conversation Baron Goto brought out a relief map of the island and

laid it on the table before us. This was of paper mache. It was, I judge, about four inches high, ten inches wide and two feet long. It accurately represented all the chief features of the country, including its cities, railways and roads. Baron Goto pointed to the places as he talked so that it was really like taking a trip through Formosa. Said he:

"We call the island Taiwan. You see it is not far from the Philippines, and we are a close neighbor of yours. The island is about 300 miles long and it has an area a little larger than Denmark. This half facing the east, is very mountainous. Many of the ranges are steep and some of the mountains are higher than any in Japan. Mount Nittakayama, which you see here, is higher than Fuji. It is about equal to Pike's Peak, and there are other peaks of 12,000 feet and more.

"These mountainous regions are the homes of the savage aborigines. It is here that the people known as the head hunters live. The western part of the island, comprising a little more than one-third of it, consists of low alluvial plains. These are inhabited by the descendants of people who came over from China. They constitute the civilized parts of the island and contain the great bulk of the population. It is among them that the most of our work is being done. We have to protect these people from the savages and we have a line of police guarding the mountain slopes from one end of the island to the other. They are aided by wire fences beyond which the savages are not allowed to go. There are guardhouses every half mile or so, and several thousand guards are always on duty. They have rifles, and they patrol the line between the guardhouses, challenging all savages who come anywhere near. If they do not stop they are shot."

Big Electric Railway Scheme.
 Pointing to the model, Baron Goto spoke of a big electric proposition which may be carried out in the future. Said he:

"You will see that we have built a railroad clear through the western part of the island running north and south from one end of it to the other. That was completed last year. With its branches it has about 300 miles of track, and it goes right through the most thickly populated part of the country. It is now run by steam; but the water supply is such that I believe we shall be able at some time to move all the cars by electricity. I made a study of that problem while I was civil governor of Formosa and I find that we can put dams here and there in the mountains and make reservoirs which will give us a con-

siderable, but the greatest increase was in the numbers of motors supplied with current, a total increase of 775 per cent.

Building a Railroad with Electricity.
 One of the greatest undertakings in the history of railroading is the Pacific extension of the St. Paul road. More than \$100,000,000 will be expended on this new line, which will reach from Chicago to St. Paul and across Montana to Seattle. Over the 800 miles of mountain stretches electricity is to be used as the motive power; 300-ton electric locomotives will haul the trains. Down the sides of the Bitter Root mountains are pouring a sufficient number of streams to furnish abundant power for all the electric motors which the St. Paul will need to handle its

streams over the mountain division. These streams are to be harnessed at a cost of millions. The boldness of conception and the unobtrusive way in which the work is being executed challenge admiration. Through the fastnesses of the Bitter Root range a tunnel 8,750 feet long is being constructed by electrical power and through it will be operated trains hauled by motors. One end of this tunnel will open in the state of Montana and the other will land the traveler in Idaho, and its grade will not exceed 1 per cent.

In general the work on the west end of the road between Butte and Seattle is nearly finished on some of the divisions, but the long tunnels and the heavy fills will take some time to complete. Falls are now laid in five different sections, but the

track is not continuous for more than 120 miles. On the Seattle-Tacoma line the track has been finished from Black River Junction to Summit, Wash. East of Seattle the road is completed for a distance of seventy-five miles, and work over the Snoqualmie pass of the Cascades is being rapidly pushed. On one division there are at least sixty fills to be made of an average depth of seventy feet, and the road built in the state of Idaho, and the tunnel will cost probably \$75,000 a mile.

Through the St. Paul pass, in the Bitter Root mountains, work is further along; the grading is completed and the bridges are built. In Seattle the terminal work is scarcely begun. In view of the fact, however, that the greater part of the extension has in some places a time of financial depression, the work in general is a marvel in the annals of railway construction.

Harnessing the Sun's Rays.
 George S. Cove, a well known Boston inventor, has perfected an apparatus for storing the sun's rays and utilizing the heat energy thus developed to generate an electric current sufficiently brilliant to light his workshops. In two days of sunshine the device generates and stores enough electricity to last six days.

The apparatus consists of a framework placed where it receives the direct rays of the sun. This framework of thin steel is divided into squares, each of which contain sixty-one tubes. These project from cement, and come in contact with a thick glass through which the sun strikes. Filled in around the tubes is a body of heat absorbing material. The tubes are connected in series by strips of metal. The difference in temperature between the two ends of the tubes generates the electric current.

Electric Window and Shutter.
 An ingenious device for opening and shutting windows will have recently been invented by William B. Strong of Washington and Easthampton, Mass. By means of Mr. Strong's invention, it appears possible not only for the invalid in bed to control absolutely the windows of the sick room, but also for the hundreds or even thousands of windows in modern skyscrapers and the shutters protecting them, to be controlled from a single point by a single operator, which might conceivably be of great advantage in case of fire. Avoiding the details of a too technical or involved description, the invention consists in revolving drums placed beneath the sill of each window. These drums having passed around their pulley cords by means of which their counter-weights, ordinary window shades, are held balanced in the desired position when raised or lowered

by hand. By means of electric motors and storage batteries these drums would be made to revolve by the mere pressing of a button or turning of a switch, and, as they revolved, the cords would be wound or unwound, and each sash separately raised or lowered as described. This would not interfere, however, with the manual operation of the window. In addition, Mr. Strong would provide a locking bolt held normally in engagement with each sash by suitable means, such as a spring, and retracted by means of a magnet in circuit with the batteries and controlled by the push button or switch. By this arrangement the locking bolt would be automatically withdrawn by closing the circuit to the motor. The whole idea is certainly ingenious; such practical difficulties as might perhaps offer would appear to lie in the cost of individual motors, etc., for each window.

Another Edison Prophecy.
 Thomas A. Edison declares that he is about to revolutionize surface car traffic by means of his perfected storage battery. It is the opinion of the inventor that tests which he contemplates making on the Third avenue line in New York in the spring will prove to public improvement. We intend to consist solely in the purchase of cars, the battery equipment and the erection of comparatively cheap charging stations, in addition to the laying of rails.

"I have been working on the storage battery for a number of months, with the idea in mind of making the heavy investment which goes with each venture of the kind nowadays," said Mr. Edison. "A generating

station which must remain practically idle most of the night is naturally a drain on the resources of any company, and after I have demonstrated the commercial practicability of the storage battery I have no doubt that future investments will confine themselves to the battery system.

"I have made no changes in the battery which I perfected years ago. The elements are the same—nickel, with an alkaline reaction—but have made those improvements that are bound to follow steady experimentation. I still now I am convinced that I have the battery that is needed. I am satisfied I could put a car into service today that would run a whole day without recharging, but there will be practical tests for a couple of months, when we will put a car on the Third avenue line in New York."

When Grant Went A-Courtin'.
 IN A recent issue of the Circle Magazine Mrs. Emily Dent Casey tells of Grant's wedding as she remembers it:

"During the ceremony I sat as quietly as I could on a pier table with Miss Amanda Shurdis, who afterward became my brother John's wife. We tried to be seen and not heard, but I fear we succeeded in being heard more than anybody else. At any rate, I have since learned it from the lips of Cadmus Wilcox (afterward General Wilcox) that I was the most pestiferous little nuisance during the whole wedding; that I was under his feet body and soul, and that he had most heartily wished me in bed. No doubt we were both as ubiquitous and chattering as most small girls are apt to be on such occasions. But, at least, I sat still long enough to admire my big sister's extreme prettiness as she stood in her bridal dress beside her quiet, self-possessed soldier. He was a clergyman's questions as he had been under the fires of the Mexican artillery. He did not look as if he were ashamed or afraid to be there, as I have seen some other bridegrooms look."

Mrs. Casey also makes an important contribution to the controversy about Grant's early habits:

"Perhaps I ought to have said before, though it will apply equally as well here, that during all the time I knew Grant, between his return from California in 1864 to

the fall of Vicksburg, I never saw him intoxicated. I never saw him under the influence of liquor. If he ever was, it was not known to the members of his immediate family. Charges that he was a heavy drinker were made in those days, and have been made since. General Grant never gave them any notice. Mrs. Grant also ignored them, though she felt deeply cut by the injustice of them, and, perhaps, it is not my place at this late date to dissent the recent statements made by a prominent man in public life, under the very shadow of Grant's tomb. Therefore, I will content myself with saying again that if General Grant was ever a victim of the liquor habit it was a condition which he happily concealed from those nearest his heart, closest in their association with him, and who loved him best."

A Sugar King's Story.
 "The late Claus Spreckles," said a San Franciscoan, "had one weakness of which he was a little ashamed. He could not resist the appeal of a beggar. Yet he knew that the charity societies are right, and that most beggars are impostors. "Have the moral courage of your convictions," I said one day, as I saw him give a beggar a quarter. "Send these fellows to the charity specialists for investigation."

"Moral courage," Mr. Spreckles murmured. "That is what we call on when we contemplate a mean action."

"A school teacher once told her class that the courage which makes us do what we

think right regardless of the sneers of others, was moral courage, the best kind. "Then, if a boy has a box of candy, like me yesterday," said a lad, and if he eats it all himself, without giving any to people that have no right to it, no matter how much they call him mean and stingy—that's their moral courage, ain't it, teacher?"

Out of the Mouths of Babes.
 "It certainly was a remarkable thing that none of the wise people at the national capital awoke to the fact that Senator Knox was ineligible for a cabinet place until his selection has been made," said ex-Judge Christianity of New York, quoted by the Baltimore American.

"It reminded me of an incident that happened in Albany a number of years ago, when I was a member of the legislature. One day for some reason a member wanted to verify a certain passage from the ten commandments, but when the Bible was handed him he did not know where to look. Neither did any of his colleagues know. Nearly everybody was aware that the divine laws were somewhere hidden away in the old testament, but this was the end of the combined knowledge of the assembly. At this juncture a meek-faced little page, a youngster of some 12 summers, piped up that if the gentleman would look in the twentieth chapter of Exodus he would find the commandments. It was a rather disconcerting thing that a chamber of grown men had to acknowledge the superior information of a child."

Progress Reported in the Broadening Field of Electrical Experiment

Electric Power Plants.
 THE director of the census has issued a preliminary report on the electric light and power stations of the United States. The statistics relate to the year ending December 31, 1907. The totals do not include isolated plants or plants that are idle or in course of construction.

The total number of establishments in 1907 was 474, an increase of 92 per cent over 1902. These plants gave employment to 24,662 wage earners and developed 5,853,121,000 kilowatt hours. These central stations supply current for 555,821 lamps and 41,877,944 incandescent lamps. The total horsepower capacity of the stationary motors served was 1,949,000. The increase in lighting during the five years has been

considerable, but the greatest increase was in the numbers of motors supplied with current, a total increase of 775 per cent.

Building a Railroad with Electricity.
 One of the greatest undertakings in the history of railroading is the Pacific extension of the St. Paul road. More than \$100,000,000 will be expended on this new line, which will reach from Chicago to St. Paul and across Montana to Seattle. Over the 800 miles of mountain stretches electricity is to be used as the motive power; 300-ton electric locomotives will haul the trains. Down the sides of the Bitter Root mountains are pouring a sufficient number of streams to furnish abundant power for all the electric motors which the St. Paul will need to handle its

track is not continuous for more than 120 miles. On the Seattle-Tacoma line the track has been finished from Black River Junction to Summit, Wash. East of Seattle the road is completed for a distance of seventy-five miles, and work over the Snoqualmie pass of the Cascades is being rapidly pushed. On one division there are at least sixty fills to be made of an average depth of seventy feet, and the road built in the state of Idaho, and the tunnel will cost probably \$75,000 a mile.

Through the St. Paul pass, in the Bitter Root mountains, work is further along; the grading is completed and the bridges are built. In Seattle the terminal work is scarcely begun. In view of the fact, however, that the greater part of the extension has in some places a time of financial depression, the work in general is a marvel in the annals of railway construction.

Quaint Features of Everyday Life

Baby Boy Saves a Girl.
 LITTLE MILK HOGAN, 5 years old, and Mildred Farrington, who is 3, youngsters of Newark, N. J., have been sweethearts all the time they can remember, so naturally Johnnie cannot understand the fuss that was made about him after he had saved Mildred's life. The little girl fell from a dock into the mud of Norwalk harbor, and would have sunk and been suffocated in the slime if Johnnie had not jumped in after her and held her head up until help came. But, as Johnnie said, when Mildred's mother kissed him, how could any man-well, any boy-have done less for the girl he was going to marry.

The tide was out when Mildred fell from the dock, and the little girl landed in mud so soft that she sank almost out of sight in it, and so thick that it held her in the grip of a quicksand. Johnnie landed beside her a moment later with a glorious splash, but he spread himself so artistically in his fall that he kept his own head above the slime, and was able to raise Mildred's face so that she was able to breathe. But the mud was too yielding to allow the children to make their way to shore, and it was not until William A. Benedict and Edward Webb, attracted by their cries, ran out a double line of planks that it was possible to pull the children to safety.

Blind's Out Five Bandits.
 In the San Bos mountains, single-handed and in the dark, James Beck, a farmer living near Sligler, Okl., captured five bandits who had robbed him of \$2,500, recovered part of the money and made a gallant but ineffectual attempt to land his game in jail. Two were wounded, but all escaped.

Sunday morning the men broke into Beck's house and stole his money. Armed only with a revolver, the farmer started in pursuit and trailed the robbers day and night until at dusk Thursday he saw them enter the San Bos mountain, saw only miles southwest of Muskogee. He lay in wait until dark, and when the quiet fell asleep Beck approached yelling "Hands up! Cover them, boys!" leading

the robbers to believe they were surrounded. Beck forced them to return \$1,800—all of his money they had left—and then attempted to bring them to Muskogee to jail.

Learning that their capture had been effected by one man, the men made a dash and escaped, but not until Beck had wounded two of them. A sheriff's posse today is searching the mountains for the robbers.

House Full of Secrets.
 Queer old secret tunnels, built sixty or seventy years ago, and leading from one of Cleveland's oldest residences to artificial caves in the hillside above the Cuyahoga river, have been discovered in the demolition of the old W. J. Gordon home-stand, on West Ninth street, opposite Lake-side avenue. W. J. Gordon, who gave Cleveland's largest park to the city, was the grandfather of Daisy Gordon Hanna (patron of New York, divorced wife of Dan R. Hanna).

Secret stairways and hidden closets abounded throughout the building, and were located on every floor, secret cabinets being found even in the garret near chimneys. Just what purpose the tunnels and strange compartments served nobody seems to know.

Gordon was always considered eccentric, but his oddities in the construction of his home and grounds were never brought to light. He was for years one of the largest wholesale liquor dealers in the central

Gossip and Stories About Noted People

When Grant Went A-Courtin'.
 IN A recent issue of the Circle Magazine Mrs. Emily Dent Casey tells of Grant's wedding as she remembers it:

"During the ceremony I sat as quietly as I could on a pier table with Miss Amanda Shurdis, who afterward became my brother John's wife. We tried to be seen and not heard, but I fear we succeeded in being heard more than anybody else. At any rate, I have since learned it from the lips of Cadmus Wilcox (afterward General Wilcox) that I was the most pestiferous little nuisance during the whole wedding; that I was under his feet body and soul, and that he had most heartily wished me in bed. No doubt we were both as ubiquitous and chattering as most small girls are apt to be on such occasions. But, at least, I sat still long enough to admire my big sister's extreme prettiness as she stood in her bridal dress beside her quiet, self-possessed soldier. He was a clergyman's questions as he had been under the fires of the Mexican artillery. He did not look as if he were ashamed or afraid to be there, as I have seen some other bridegrooms look."

Mrs. Casey also makes an important contribution to the controversy about Grant's early habits:

"Perhaps I ought to have said before, though it will apply equally as well here, that during all the time I knew Grant, between his return from California in 1864 to