

WEB OF STEEL

By CYRUS TOWNSEND BRADY FATHER AND SON

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BERT MEADE'S FRIENDS LOSE TRACK OF HIM WHEN HE GOES WEST, CHANGES HIS IDENTITY AND GETS A JOB, BUT THEY SET OUT TO PROVE HIM BLAMELESS OF THE BRIDGE DISASTER

Bertram Meade, Sr., plans an international bridge for the Martlet Construction company. His son, Bertram Meade, Jr., resident engineer at the bridge site, and Helen Illingworth, daughter of Colonel Illingworth, head of the Martlet company, are engaged to marry when the bridge is completed. Young Meade had questioned his father's calculations but was laughed at. The bridge collapses with 150 workmen. Meade, Sr., drops dead after writing a letter for the public, taking all blame for the accident. This letter is hidden by Shurtliff, a faithful old secretary. Young Meade takes all blame to protect his father's professional honor, breaks the engagement with Helen and disappears.

spent mainly out of the United States. He had never been connected with the Martlet and its employees until he had been associated with his father on the International. He could have gone among them with little danger of immediate discovery, since most of the men he had known had gone down with the bridge, but he decided not to do so. The work on the dam would be simpler and he would have less opportunity to betray himself and it would give him more chance to work up in a plausible and reasonable way. Besides, if Colonel Illingworth came on to inspect the bridge, as he would probably do, Meade would have to leave before his arrival. The dam would be safer. No one would ever think of looking for him there. And no one would ever recognize in the rough-bearded workman the clear-cut, smooth-faced young engineer of other days.

if by working together there was not some way by which we could prove that Bertram Meade has assumed the blame to save the honor and fame of his father." "You believe that, Miss Illingworth?" "I am sure of it." "So am I," said Rodney quickly. "Thank God," cried the girl a little hysterically, surprised and almost swept off her feet by this prompt avowal by one who, though young, was already an authority in the literature of engineering. "Why do you say that? What evidence have you?" "Unfortunately," answered Rodney, "I haven't any tangible evidence whatever, but I know Bert Meade as few people know him, Miss Illingworth, perhaps not even you," he went on, in spite of her unspoken, but vigorous protest at that last statement, as she shook her head and smiled at him. "And there are several little circumstances that make me feel that he could not have been to blame. Have you any ground for your conviction?" "Probably even less than you have and yet I, too, know him," Helen Illingworth looked into the plain, homely, but strong, reliable face of the man and dismissed any thought of reserve from her mind.

CHAPTER XI—Continued.

Again the train was delayed and held up for half an hour just as it reached the Mississippi river. He left his seat in the dining car, his dinner on the table, to go out and inspect the bridge during the half-hour that the "limited" lay idle. The next day some enormous irrigation works on a western Nebraska so engrossed his attention and aroused his interest that in spite of himself he stopped over between trains to see them. And these excursions were typical. Yet after every one of these excursions back into his own field, his conscience smote him. Was he never to get away from this engineering? Was there nothing else for him but brick and stone, steel and concrete, designs and plans and undertaking and accomplishment in the world? Because it was the thing that he must abandon and put out of his mind, engineering seemed the only thing he cared for. Winters was glad to see him. He and Rodney and Meade had been the warmest of friends. Of course Meade could not tell Rodney the truth on account of his newspaper connections, but he decided finally that he could and would tell Winters under assurance of absolute secrecy. For one thing the big gentleman had bluntly refused to credit friend's first statements; and, when he had at last heard the truth, he blamed Meade's nobleness of his self-sacrifice. The arduous, practical Winters put it in his way; Meade was capable of doing splendid service to humanity as an engineer and had fair to be even better than his father, yet for the sake of the fame of a dead man, to whom after all it would matter little, had thrown away that splendid opportunity.

mands. She entered into its pleasures and fulfilled its duties. He was jealous of everyone who might come in contact with her, but he knew the names of none except Rodney. And they were suspicious of his avowal! That was balm to his soul. Of course Helen Illingworth was suspicious, but why should Rodney doubt his assumption of the blame? And they were working to establish his innocence. The thought disquieted him lest they should discover the truth in some way. And it gave him joy also. They would work despite any remonstrance from him. He thought of that protest to his father always with uneasiness. If he could only have found it and destroyed it himself he would have been happier. Could it be in existence somewhere? Would it turn up? Would they unearth it? Well, he had done his best for his father, yet he was glad those two disbelieved and were working for him.

Meade had been the most brilliant, Winters the most indifferent, Rodney the most persevering, of the trio at college. He remembered that well. His first thought was to forbid Rodney to do anything further, although how far his friend would respect his wishes he could not tell. Anyway, he did not have to decide that matter, because he could not say a word to him. To



Winters Passed the Letter Over to Meade Without Comment.

have allowed Winters to write would have betrayed his whereabouts. He was living with Winters under an assumed name of course. He had had his hair cut differently and had grown a beard and mustache. He thought it would have taken a keen eye indeed to have recognized him with these changes.

In the end he handed the letter back to Winters, only charging him that if he wrote to Rodney he must not betray the fact that Meade was with him. He had plenty of time to think over the situation. He decided finally that so long as he had been born an engineer and trained and educated as an engineer he would have to be until the end of the chapter. He would go out and seek work, not such work as his ability and experience, but under some assumed name he would begin at the very beginning, at the foot of the ladder as a rodman, if he could; and then he would work on quietly, faithfully, obscurely, praying for his chance. If it came he would strive to be equal to the opportunity; if it did not at least he would be engaged in honest work in an honest way.

It was a very humble program, not at all promising or heroic or romantic, just a beginning. He would work on and wait. They say that all things come to him who waits. That is only half true. Some things come to him who waits sometimes. That is more nearly accurate. Well, he could think of no better plan. So he bade Winters good-by, swearing him again to secrecy until he should lift the ban against speech, and rode away. When he got to the little village on the Picket Wire below the dam he stopped a long time gazing at the long bridge, or viaduct, of steel that was replacing the old wooden trestle and carrying the railroad from the hills to the eastward over the river.

It was not such an undertaking as the lost International, still it was interesting engineering construction. It was work that would be intensely congenial, to which he was drawn almost irresistibly, yet he managed to hold himself aloof. The Martlet people were building this steel bridge and they had just finished the arch up under the mesa. A well-known construction company was building the great earth dam across the Picket Wire in the valley. Meade's engineering life had been

The dam was twenty miles up the valley. Yes, he would be less apt to be observed working there than on the bridge. Yet as he recalled that private car and that it might come there, he realized that she might be on it. His heart leaped even as it had leaped at the sight of the viaduct then building, as it had quivered to the familiar rat-tat-tat of the pneumatic riveters and the clang and the clash of the structural steel. But what was the use? He would not dare trust himself to look at her even from a distance. No, it was the dam that best suited his purpose, so he turned away from the bridge and rode up the valley. There he was fortunate in falling into a position, as has been set forth.

CHAPTER XII.

Marshaling the Evidence. For all her sweetness and light, Helen Illingworth was dowered with intense energy and a powerful will. What she began she finished, and she was not deterred from beginning things by fears of consequences. She was convinced that Meade had not told the truth in that famous declaration in his father's office. She respected him for his desire to shield his father's name and fame even at the expense of his veracity, albeit she would not have been a woman if she had not resented the fact that in so doing he had sacrificed her happiness as well as his own.

The question whether Meade, Jr., was the more responsible or even responsible at all was more or less academic to Colonel Illingworth. He would have had nothing further to do with either of them if both were living, and certainly not with the younger survivor. He tried to believe that if it had come to a final choice the daughter, in spite of the fact that such is the habit of women in the experience of life, would not have given up age and her father for youth and her lover. Indeed she was too genuinely devoted to her father to do that except as a last resort.

She cherished the hope first, that Meade could re-establish himself—she had too sweeping a confidence in his character and capacity to doubt that—and second, that it could be shown that he had not been responsible for the failure of the bridge. She was more and more convinced that his assumption of the blame had been dictated by the highest of motives and instead of being a fit subject for censure and condemnation, he merited admiration and applause. She hoped with her woman's wit to prove this eventually, perhaps in spite of her lover, and to this end she applied herself assiduously to solve the problem.

To her, at her request, came Rodney. Now the reporters had dealt very gently with Helen Illingworth. They had made no announcement of the engagement or of its breaking at her father's earnest request. There was no necessity of bringing her into the bridge story, although it would have added a dramatic touch to their narratives. Her inclination had been to avow it. But upon reflection she saw it would have annoyed her father beyond expression, it would not have helped Meade any and it might hamper her in her work. She realized that she had Rodney to thank for this omission and after she had time to collect herself she asked him to call upon her. He was very glad to come.

"I sent for you, Mr. Rodney, on account of Mr. Bertram Meade," she began, after thanking him for his courtesy toward her the day the Meade died and thereafter. "I want you to help me."

"I shall be delighted to do so for your own sake. I know how deeply interested you are in Meade's rehabilitation."

"Mr. Rodney," returned the woman, flushing a little, "you know of course that we were engaged. He considers the engagement broken."

"I suppose so. That would be like him," said Rodney gravely. "Indeed as a man of honor he could do no less."

"You are all alike," said the woman a little bitterly. "Your notions are supreme. You may sacrifice love and your best friend so long as you preserve those notions of honor intact."

"And yet if we weren't honorable men you wouldn't care for us at all."

"Yes, I suppose that's it. Well, I do care very much, as you understand. I may as well be frank with you. My father, of course, is bitterly antagonistic to Mr. Meade. He won't even allow his name to be mentioned."

"One can hardly blame him for that, Miss Illingworth. The failure of the bridge seriously embarrassed the Martlet Bridge company, and it is a great handicap for them to overcome in seeking any further contracts."

"But I did not summon you here to discuss the affairs of the Martlet Bridge company," said Helen, "interesting though they may be, but to see

"Now, in the first place," he began, writing and speaking at the same time, "point one is Meade's absolutely unbounded devotion to his father. The old man was not always right. The boy was as clear as a bell on most things, but I recall that he would maintain his father's propositions tenaciously, determinedly, long after everybody, perhaps even the old man himself, had been convinced of their fallacy. Engineering is in Meade's blood. He is the fifth of his family to graduate at Harvard and three of his forebears were engineers, his grandfather noted and his father world-famous. He fairly idolized his father. The affection between them was delightful. The king could do no wrong. Meade was quick-tempered and not very receptive to criticism, but he would take the severest stricture from the old man without a murmur."

"Here we have," said the woman, who had listened with strained attention, "an early devotion to a person and an unbounded respect for his attainments. Go on."

"The next point is, Meade was inordinately proud of his family reputation, especially in the engineering field. Of the two of the line who were not engineers, one was a soldier and a distinguished one, but his career had little interest for Meade. I have heard him say that there had been a steady upward movement in his family, that had reached its culmination in his father. He hoped to be a good, useful engineer, but he never dreamed of going any higher or even approaching the altitude of the other man."

"It was a sort of fetish with him then, wasn't it?" asked the woman as Rodney stopped again.

"You have hit it exactly. His love for the man, his admiration for the engineer, which sometimes blinded him, and his pride in his father's career as typifying his family, was unbounded."

"You have established a motive for any sacrifice; love, respect, pride!"

"That's the way it presents itself to me, Miss Illingworth. I know thoroughly the quixotic, impulsive, self-sacrificing nature of the man. I know



"The King Could Do No Wrong."

that he would have done anything on earth to save his father, even at the sacrifice of his own career, and since I have seen you I can realize how powerful these motives must have been."

Rodney said this quite simply, as if it were a matter of course, rather than a compliment, and bluntly as he might have said it to a friend and comrade, and Helen Illingworth understood and was grateful.

"It has been a grief to me that I weighed so little in comparison," she said simply.

"I shouldn't put it that way exactly," observed Rodney carefully. "You see even if it could be shown that it was the old man's fault entirely the

young one would still have to share some of the blame."

"You mean he should have foreseen it and pointed it out?"

"I think he did, but if he did foresee it and point it out, he should not have allowed the older man to overawe him or force him to accept what he believed to be structurally unsound. I don't know whether he reasoned it out. I don't think he had time to argue the case, the shock was so swift and sudden, but as soon as he did see the situation he discovered that you were lost anyway, except of the charity of your affection, which he could not accept, and that he could save his father. This may all be the wildest speculation, but this is the way it presents itself to me."

"And to me," said Helen, "but before we go any further, let me say I should rather be his wife than enjoy any other fortune."

"That is the kind of affection his qualities merit and would evoke in the mind of a discerning woman."

"Thank you. Will you go on, now?"

"Of course you know that what we have said is not evidence. It is all assumption, perhaps presumption."

"It's as true as gospel," said the girl earnestly.

"To you and to me, yes. Well," he continued, "I remember that Meade and I were talking just before he went to Burma three years ago about a new book by a German named Schmidt-Chemnitz, in which certain methods of calculations were proposed for the design of lacings. You know it was the lacings of one of the compression members of the cantilever that gave way."

"Well Meade and I got into a hot discussion over some of Schmidt-Chemnitz's formulas. I maintained that they were wrong. He took the opposite view. He was right. He was so interested in the matter that after we separated he wrote me a letter about it, adding some new arguments to reinforce his contention. The other day I made a careful search among my papers and by happy chance I found the letter. I was half-convinced by his reasoning then, although the matter was dropped. I am altogether convinced now. His argument is very clear. I have examined since then the plan and sketches for that bridge. The calculations did not agree with those of Schmidt-Chemnitz. His methods were not used. Meade could not have forgotten the matter. I am morally certain that he made a protest to his father, probably in writing, then allowed himself to be persuaded by his father's reasoning. As a matter of fact, I suppose that Bertram Meade, Sr., was a greater authority on steel bridge designing than even Schmidt-Chemnitz. Well, sometimes, the smaller man is right. We know now, and Bertram Meade, Sr., would admit it if he were alive, that Schmidt-Chemnitz was right, and we can make a good guess that young Meade did not let it pass without a protest."

"Mr. Rodney, it's wonderful."

"Well, that's not all. There was not a little bit of hesitation in Meade's assumption of the blame, not a person who heard it doubted it, apparently. But I was the first man to see the older Meade except his son and Shurtliff."

"Oh, Shurtliff!"

"We'll come to him presently. It was obvious that the older Meade had been writing. I don't know whether the others noticed it, but it is my business to take in even inconsiderable details. The pen was still constricted and his hand was still dropped out—in fact, I myself took it out and laid it on the desk."

"His last conscious act was to write something, therefore?"

"Yes; for confirmation I ascertained that there were ink-stains on his fingers."

"What did he write and to whom?"

"I don't know. I can only guess."

"What do you guess?"

"The assumption of entire responsibility and the exculpation of his son, probably to some paper."

"From the same motives that prompted Bert?"

"No, because it was true. But that is only an assumption, although not altogether without further evidence."

"And what is that?" asked the woman eagerly.

She had sat down opposite Rodney at the table and was leaning toward him. Her color came and went, her breathing was rapid and strained under the wild beating of her heart. "The blotter on the desk. I examined it at my leisure. It had been used some time. I went over it with a magnifying glass. Meade, Sr., had evidently written a letter. I found the words 'fault is mine.' I have the blotter in my desk. The word 'fault' is barely decipherable, 'is' can be made out with difficulty, but 'mine' is quite plain. I am familiar with the older Meade's handwriting, and though this is weaker and feebler and more irregular than was his custom—ordinarily he wrote a bold, free hand—this is unmistakably his. Of course no one can say that he wrote any letter. This is piling assumption upon assumption, and, furthermore, there is no evidence of any signature having been written beneath it."

"Is that all?"

"There is one more bit of evidence. The sheet of paper on which the design computations for the compression chord members appear was not with the other plans and tracings of the bridge."

"How do you know?"

"These plans were taken over by the Martlet company after Meade's death, and Mr. Curtiss and I examined them. We found that sheet missing."

"It's wonderful!" cried the girl, her eyes shining. "I was convinced before, but if I had not been, you would have persuaded me beyond a doubt."

"I have persuaded myself, too," said Rodney. "But there is not a single thing here that would justify any publicity, even if we were prepared to go against Meade's obvious desire. As I say, it is all assumption. No one could prove it."

"You are wrong," said the girl. "Shurtliff."

"I wondered if that would occur to you."

"Of course. You think that Meade, Sr., wrote a letter assuming the blame because it was his. I have no doubt

in the world now that Bertram Meade had made his protest in writing. Perhaps he indorsed it on the missing sheet," continued the woman, making bold and brilliant guesses. "Or maybe he wrote a letter that was attached to the sheet that we lack, and Mr. Meade got it out of the safe and wrote his letter and attached it with Bertram's protest to the missing drawing and gave them to Shurtliff and told him to take them to the papers. You know Shurtliff said that Meade declared he would assume the blame and he told the reporters so. Shurtliff has or he knows who has, the missing paper."

"But what motive would the secretary have for such concealment?"

"He idolized the older Meade. Mr. Curtiss told me about him. A failure



The Woman Rose to Her Feet.

himself when he was a young man. Mr. Meade had faith in him and offered to promote his engineering efforts, but the man preferred to attach himself, personally, to Mr. Meade and so he became his private secretary. By his own showing he had been with the dead man on that afternoon. He has the papers."

The woman rose to her feet as she spoke with fine conviction.

Fate, it seems, has marked a strange pathway for young Meade to follow. Things begin to happen around him at his new job. There are interesting developments in the next installment.

(TO BE CONTINUED.)

MUST KEEP SUCCESS IN MIND

He Who Would Reach the Goal of His Desires Cannot Admit Possibility of Defeat.

Success, to be achieved in reality must be mentally lived for months sometimes for years, before it arrives. Napoleon, with his dreams of power and conquest, realized them more fully than any other man. Jeane d'Arc, with her dreams of freeing her country and setting her king on his rightful throne, accomplished her desires through the very force and strength of her thoughts. To her it was the sole object of her life; he mind knew of no other project but that which the spiritual voices had bidden her pursue.

We could cite hundreds of instances in history, but unless you are disposed to believe the truth of the power of mind you would be no more convinced than you are now. Look about you at the cases where good luck seems to have attended the efforts of well-known workers of today. You will find in practically every instance that the person who reaches his goal is the one who works, to be sure, but with no other idea than success in his mind. Nothing daunted by petty discouragements or setbacks, he goes right on, having no doubt that in the end he will achieve success. And he usually does.

Providing a Target.

With the spread of overlaid auto-touring the milepost and guidepost are coming back into a prominence that is reminiscent of stage coach days. The leading problem of countries, states and auto associations in this line is the development of a signpost that will stand up under the abuse it almost invariably gets. One of the newest designs was developed by a prize contest in Illinois. The prize-winning design calls for a post which is built of concrete throughout. Another concrete post which is finding favor has even the names of towns and distances in concrete letters. In the West much damage is done by hunters and others, who shoot the signboards full of holes. The newest post in this region has all directions on one board, and a target specially painted on another, with the adjuration, "If you must shoot, shoot here!"

Removing Rust From Nickel.

First smear the rusted place with grease and rub it well in; this in itself will frequently remove a great deal of the rust. Allow the grease to remain for several hours and then remove it with a rag which has been dipped in ammonia. This usually will remove all traces of the rust. If, however, a stubborn spot or two remains, wipe it with a little diluted hydrochloric acid. The acid should be used very quickly and with care, otherwise it will remove the nickel as well as the rust. When all the rust has disappeared wash thoroughly with clean water and then use a metal polish.

How It Came About.

The Norwegian was relating his experiences to Pat. "Why," he said to Pat, "we're ice in the streets in Norway in June." "Ah, sure, that's nothing," said Pat; "why, we've ice here in the streets of Dublin in July two feet thick." "And how is that?" said the traveler, much astonished. "Well, do you see," said Pat, "the ice fell out of an ice cart."

Self-Protection

is a matter that should concern everyone subject to spells of

HEARTBURN INDIGESTION BILIOUSNESS OR MALARIA

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HOSTETTER'S Stomach Bitters

GIANT GUN INGOT IS CAST

Bethlehem Steel Works Pours 350,000 Pounds of Metal into One Great Mold.

At the Bethlehem steel plant the largest octagonal corrugated ingot mold ever cast in the United States and perhaps in the world, was made for the first 15 and 16-inch guns. South Bethlehem correspondent of the Philadelphia Record writes. The dimensions of the mold are 15 feet and 7 inches in height, with a mean diameter of 9 1/2 inches. At the thinnest section the thickness of the metal is 15 inches, while the heaviest section is 20 1/2 inches.

Owing to the necessity of pouring this casting very quickly, it was cast in the steel foundry instead of the iron foundry. It took just four weeks to make the casting.

Standard Bessemer steel iron melted in three large open-hearth furnaces was suspended in ladles over the mold at one time. A continuous runner from these ladles was made, so that the iron was thoroughly mixed before entering the mold. Three hundred and forty thousand pounds of metal was charged in these furnaces and after the mold had been filled, 10,000 more pounds of iron was brought from the iron foundry, three quarters of a mile away, to pour into the sinkhole to feed up the shrinkage. This added metal was filled in at the rate of about a ton a time for three hours, when the shrinkage stopped, the metal, however, being liquid five hours after the mold was poured.

Before this mold can be used large steel bands 12 inches wide and 8 inches thick must be shrunk around each end of the casting. This large ingot mold will be left covered in sand for some time, after which the 100-ton cranes will be necessary to pick it up and take it to the open-hearth department.

BOSCHEE'S GERMAN SYRUP

Panacea of the Home the World Over.

Why will you allow a cold to advance in your system and thus encourage more serious maladies, such as pneumonia or lung trouble, when by the timely use of a few doses of Boschee's German Syrup you can get relief. This medicine has stood the test of fifty years. It induces a good night's sleep with easy expectation in the morning. For sale by druggists in all parts of the civilized world in 25 and 75 cent bottles.—Adv.

Louis Botha as a Fighter.

The Boer army organization would not be taken as a model for any modern military system, but its very weaknesses made easier the rise to high command of able subalterns. At least it gave a young officer his chance to show what was in him. Botha got his chance under Joubert. It was only a matter of weeks before this field cornet was in command of armies. At Colenso Botha with 6,000 men held off Buller with 18,000 and made such use of the deep trench as has become familiar in the great war during the past two years. European experts have studied with profit Botha's brilliant defenses. The shrewdness with which he divined the enemy's intentions was almost uncanny, and more than once it made him victor of a doubtful field. His only military training had been received years before in campaigns against the Zulus. He was never known to use a map. His accurate knowledge of the country made maps superfluous.—Review of Reviews.

Important to Mothers. Examine carefully every bottle of CASTORIA, that famous old remedy for infants and children, and see that it bears the Signature of Dr. J. C. Fletcher. In Use for Over 30 Years. Children Cry for Fletcher's Castoria.

Limit to Space. "Move up in front there, please," shouted the conductor of one of the 5-to-6 a. m. Illinois street cars.

"Can't do it; door's shut," answered a stentorian voice in that direction.—Indianapolis News.

A man who is blind to his own interest finds many persons who are anxious to lead him in the other direction.

Greatest of all feats of strength is holding one's tongue.

Sore Eyes

Granulated Eyelids. Eyes inflamed by exposure to Sun, Dust and Wind quickly relieved by Murine Eye Remedy. No Smarting, just Eye Comfort. At Druggists or by mail 50c per Bottle. Murine Eye Salve in Tubes 25c. For Book of the Eye FREE ask Murine Eye Remedy Co., Chicago