Bellefonte, Pa., March 8, 1907.

THE BIRTH OF THE OPAL

The sumbeam loved the moonbeam, And followed her low and high And the moonbeam fled and hid her head, e was so shy, so shy.

The sunbeam wooed with passion-Ah! he was a lover bold-And his heart was afire with desire, For the moonbeam pale and cold

But she fled like a dream before him. Her hair was a shining sheen; And oh, that face would annihilate The space that lay between!

Just as the day lay panting In the arms of the twilight dim, The sunbeam caught the one he sought, And drew her close to him.

Out of his warm arm startled. And stirred by love's first shock, She sprang, afraid, like a trembling maid

And hid in the niche of a rock. And the sunbeam followed and found her And led her to love's own feast; And they were wed on that rocky bed And the dying day was their priest.

And lo! the leautiful opal, That rare and wondrous gem. Where the moon and the sun blend into one Is the child that was horn to them

WELLINGTON'S GIRL

Rainey, the news editor, went to Blake, the managing editor, with a telegram.
"Wellington wires to know if he can't have his vacation now," said Rainey. "He wants to stop over at Newton on his way home.'

"Tell him," instructed Blake, "that any vacation he takes now will be made permanent. We're short-handed, and we want him back here in a hurry. He ought to have started last night." Rainey went back to his desk and an-

swered the telegram as directed. Wellington had been sent out on an im portant story, which he had handled suc-cessfully, and he should have been on his way home. Instead, he was still some hundreds of miles away, and he showed no disposition to return.

Rainey went to Blake again a little later with another telegram.

"Wellington wants to stop over Satur-day and Sunday at Newton," he said. "No!" thundered Blake. "He's lost one day already, and we need more men than we have right now—especially good men. I can keep Wellington humping every minute. We ought to have him on that bribery story. What is there at Newton, anyhow, that makes it so interest-

"Wellington's girl, I believe," replied Rainey.

"Oh, that's it, is it?" exclaimed Blake, with a laugh. "Well, we're running a newspaper and not a matrimonial bureau. Tell him to get back here on the first train.' Blake was not really as bard-hearted as this might seem to indicate. If the circumstances had been favorable he would have given Wellington his vacation at once, but the circumstances were not favorable, and he reasoned that the paper needed Wellington at that particular time more than the girl did. It might seem hard for a man o have to pass through her town without stopping over to see her, but it happened to be a business necessity in this case. So he was decidedly angry when the third telegram So he was

"Wellington says he's going to stop at Newton," Rainey announced.
"Fire him by wire!" instructed Blake

angrily. "Can't," returned Rainey. "He said he was leaving for Newton when he wired last, and he gave no Newton address. May not be at a hotel, and we couldn't pick out the right one anyhow.'

'What's the girl's name ?" "Don't know."

"What a devil of a lot of trouble women make !" growled Blake. "I'll see that a letter of discharge is on his desk when he gets back, and that the reason is clearly

The letter was written and put on Wellington's desk, and thereupon Wellington became a negligible quantity so far as the "Express" was concerned. He was considered no longer a member of the staff when a startling Associated Press bulletin was received the next day. There were others who could handle big stories quite as well, if not better, and this was so big that the slighting of less important matters never would be noticed.

The bulletin read : "Cloudburst in the mountains. Town of Highwood destroyed. Through passenger train in Highwood depot Wires down and tracks washed out. No word since last night, except story of one half dead survivor who has just got through.

Blake jumped for an atlas and a time table, and Rainey and the city editor leaned over him as he looked up Highwood. "Can't get any one there from here be-fore tomorrow," he announced, "but it's more than a single-day story." Then to the city editor : "Start three men and an artist, Brown. Tell them to be there to-"Start three men and an morrow morning, if it's necessary to buy up the road to get through. Rainey and I will figure out to-day's story."

The city editor hurried back to his desk,

and Blake turned to the map again.

"It's an awkward place to reach," he "We haven't a first-class correspondent within striking distance, and we've got to have our own story. Associated Press alone won't do." His index finger, passing over the map, stopped at one town and then another, and he read off the names. 'Tell our correspondents there to try get through. One of them may make it, and-Hold on a minute ! Here's Newton, only sixty miles away! Lord! we've just got to get hold of Wellington! Wire him, Rainey, and then try the long-distance phone. They may know him at one office Why the devil didn't he

mention his girl's name?" While Rainey was doing this, Blake tried to arrange for a report in a more roundabout way, but every other paper seemed to be experiencing his difficulty in getting men to the spot, and there was no certainty of anything. Nor was Rainey more suc-cessful in his effort to locate Wellington. They knew nothing about him at the tele-phone exchange, and the telegram was re-

There is nothing more aggravating, no greater strain on the nerves, than comes with an attempt to get the clusive details ready planning for a photographer and of a difficult story. Blake and Rainey worked over it indefatigably, taxing their ingenuity to the utmost, trying to arrange with papers nearer the scene, but there was

that Newton wanted him on the long-dis-

"Wellington at last!" he exclaimed. But it was a feminine voice that came to

the voice, and it was a very pleasant voice, although Blake was too excited to think of that then

"Do I want-" He broke off short and demanded sharply. "Where is he?"
"I thought you did," said the voice. "I heard a messenger was hunting for him with a telegram, so I got the telegram and opened it. Then they told me you'd been telephoning, too, and I thought-"

"Are you Wellington's girl?" Blake blurted out thoughtlessly, and he heard a gasp at the other end of the wire. Why-why, yes, I believe I am," came

the hesitating reply. "Well, get him to the telephone quick." "I can't; he isn't here."
"Not there! Oh-" Blake remembered

that he was talking to a woman just in time to chop off the last word.

"No," said Wellington's girl, "he isn't here. He left for Highwood on the first relief train this morning—ran right away from me when I hadn't seen him for—" "Gone to Highwood!" cried Blake.

"Yes, he took three men with him."
"Great old Wellington!" was all Blake

could say.

"And a photographer."
"Bully old Wellington!" cried Blake.
"But he isn't old!" protested the girl, aggrieved. "He's anything you want to have him,"

returned Blake gallantly. "And he ran away from me," complained the girl. "I'll give you a bill-of-sale of him when

ne gets back !" cried the jubilant Blake. 'Do you want any bulletins?" she ask-"Bulletins !" repeated Blake. "Say you're a newspaper man's girl all right. We want every line we can get."

"I'll tell you all that's known here, if on like," she said. Blake himself remained at the telephone

and took her bulletins, repeating them to a reporter who wrote them out. 'She's a prize!" he exclaimed as he terthought.

Wellington knew that he was making trouble for himself when he stopped over at Newton, but he did not believe it to be as serious a matter as Blake was disposed to make it, and besides he wanted to bring the girl back with him. He had no absolute certainty that he could do this on such short notice, but he thought a vacation at that time would give him a fair chance of success, and even two days might enable him to reach a more definite and satisfactory understanding. So he took the risk and disobeved orders.

"Blake," he told her, "must be mad enough to tear the paper off the wall, but I just had to stop over and see you." "Of course," she said, as if it were a

matter that admitted of no argument. "Who is Blake ?" "He's the managing editor. He said I coulun't stop over."

"How ridiculous of him !" she com-

"I'd like to tell him what I think of just left, and local men had been a him," she said. "I'd like to have you," he assured her

with cheerful mendacity. "That's why I want to take you back with me." "Take me back with you! In two days!" "Of course. It's just as easy to be mar-

ried in two days as it is in two weeks or two months or two years." "I never said I'd marry you," she protested.

"I know it," he admitted calmly, "but you never said you wouldn't." "That's so; I never did," she returned thoughtfully. "I never said I wouldn't marry you, but there are a whole lot of other people I never said I wouldn't marry,

"The others don't count," he asserted. "They haven't been writing to you and dreaming about you and disobeying their managing editors to see you. I ought to be rewarded, you know."

"But two days !" The form of this protest seemed to him "Call it two weeks," he urged. "I'll

esign and stay over, if necessary "No, no," she said, shaking her energetically.

"Two months," he persisted. "I'll get my vacation and come back." "Perhaps," she conceded. "I won' promise. I must have time to think."
"Think!" he exclaimed. "What have you been doing all the time I've been think-

ing and hoping and writing and trying to get to see you?" "Thinking," answered the inconsistent

"Of what ?" "Well," she replied evasively, "I hadn't got as far as a wedding day." He interpreted this so satisfactorily that his arms just naturally appropriated her. "But you will now," he declared con-

fidently. "Can't I have a little time to think, if I want it?" she asked, with another bewildering change of manner and tone don't want to be hurried. Let's talk of

mething else." Wellington never had been so foolish as to think that he fully understood girls, but he had thought he knew a little bit about this one, and he was the more bewildered in consequence. She began to talk lightly and brightly of other things, and he had to

make the best of it. He was in this perplexed state of mind when the news of the cloudburst came. Instantly, the newspaper instinct became dominant, and all else was momentarily forgotten. His eyes sparkled, his mind was alert, he was considering all the possi-bilities before he fully realized it.' The tracks were gone, the wires were down, the place was isolated; it would be difficult to get men there from anywhere, and he was pertainly the nearest upon whom his office could rely. A train would take him part way, and he could push on with horses or

"That's my story !" he announced jubilantly. A newspaper man thinks only of

the story as an opportunity, never as a hor-"But you're not going to run away from me," she protested. "Why, you've hard-

ly more than got here." "It's my story," he repeated, as if he had not heard her. Indeed, he was alwondering whether he could get any local

"I won't let you go !" she declared.
"Won't let me go!" he exelaimed.

no assurance of a satisfactory report. So it "Why, Kittie, it's my story ; I'm on the naturally happened that Blake was in no spot—almost. No one else from the office amiable mood when he was finally notified can reach it. You don't want me to fall down on the chance of a lifetime, do you? You don't want me to shirk! This is a big thing!" His enthusiasm was infectious, anxious wait, and every man nerved himand she began to feel something of the him over the wire.

"Do you want Mr. Wellington?" asked it if I tried. And, perhaps, you can help." the raise and it was a very pleasant voice, "What can I do?" she asked.

He was planning, speculating, considering all the possibilities as he talked. "I don't know what the conditions will be around there," he explained, speaking rapidly. "I may have to come back here to get wires. I may want typewriters who can take from dictation on the machine.

I'll be late and in a horry, you know.
I'll telegraph or telephone—to you."
"Will you really?" Her eyes sparkled at the suggestion that she might bave her share in the work and excitement. "I shall be ready, and I'll look out for bul-

letins." "Bulletins! Well, you certainly are a newspaper man's girl," he laughed. "Do your best!" she urged, and she kissed him. She certainly was a puzzling girl. Only a moment before she had demurred to his going, and now she was giving him most surprising and delightful en-

Kittie's brother, Jack, was wil to go. He was a college boy, bright and quick, sharply, "or I won't give you the fast mail and he said he could get another youth story." who had some newspaper experience.

station. But don't miss the train." Jack appeared at the station with two assistants, so the party, with the photographer, numbered five.

Throughout all the excitement of that day the question of a wire was uppermost in Wellington's mind. Of what use was even the most perfect story, if he could not tures go by mail.' get it to the office? He made inquiries on the way, and he gave all possible attention | the telephone a moment. miles from Highwood they had to leave write it out on a split second schedule." the train. One wire was working that far, Then to the girl: "Let ber slide!" and he was told there might be a second by evening. But the facilities were already overtaxed by official relief business and

the men from the nearer towns. From this point they pushed on by wag-on, making the last two miles on foot. Conditions, he was told, were as bad or lington and the others dictated to typefinally got up from the telephone desk. worse on the other side of Highwood, and there was practically no chance for a nearer on Wellington's desk," he added as an afworse on the other side of Highwood, and writers. pushing on, but the work was difficult and work was done. slow, and as yet they were only extending the wire already in use, which would add nothing to the facilities, even if they got it working to a pearer point by evening

These were the conditions that Wellingtoh kept in mind as he directed the work of his little force. "Copy" was prepared as opportunity offered, a box or a board or one's own knee serving as desk, but the and delightfully feminine. He liked the One man was sent back early, to try to get the story started. Later, the others foloffice in a state of siege.
"No chance here for what we've got,"

was Wellington's decision. "We'd be lucky to get a thousand words through," Their horses were pretty well winded, of comprehension. for, at the risk of life, they had come down the mountain road on the run. It was the mountain road on the run. It was the mountain road now—time and a wire; her. She's a mascot! Won't come! Huh! they were all inhabited by students of Epicher and the mountain road on the run. It was the counted now—time and a wire; her. She's a mascot! Why she told me through the darkness to another station, "Isn't it?" he laughed. "He'll be but there were only three wires here. The she tries to bluff you." pretty warm, but I guess I can explain it Associated Press had one, the second was all right when I get back."

them with the third. "It's Newton for us!" exclaimed Wellington. "We can get wires there." "No train," said the station agent, when "May be oue later, but it's rendering. certain.'

"Give us an engine !" said Wellington. "Can't, without orders," returned the

"You've got to !" insisted Wellington. "You've got a railroad wire open. Wire headquarters that the 'Express' wants an

engine to Newton." Well, I guess not," was the reply. think too much of my job to bother 'em that way at a time like this.''

"I'll telegraph !" threatened Wellington. "A telegram to your superintendent will have to go through, and I'll wire him that you refuse an engine to Newton for the 'Express." "Hold on !" cried the station agent, as

Wellington began to write his message. "I'll wire him myself." "And put a private message through to

Newton for me."
"No, sir!" replied the station agent vigorously. "Nothing but railroad business on that wire."
"All right," acquiesced Wellington.
"Get the engine!" He hurried back to the

telegraph office and fought his way to the "One word to Newton," he pleaded; "just one word! Sandwich it in any-There was instant outery and protest.

He must take his turn, which would mean that his one word to Newton would get through some time the next day. But he insisted and argued and pledged and offered money. One of the wires in operation was working through Newton, and a word could be sandwiched in without appreciable delay. He won his point finally, and sent the single word "Coming" to Kittie. There was a protest that this was no time for love messages, but he insisted that this was strictly business. And it was.

"It's the best I can do," he confided to ack. "It will be nearly midnight before Jack. we get there, and we'll want wires and typewriters. I hope she'il understand." "You get your engine, and the track's clear !" the station agent called out.

In the office of the "Express" there was anxiety and excitement. Fragmentary reports of the cloud burst they had, but there was no complete story and not a line of 'special" except what had been secured from surrounding towns. No word of any sort had come from Wellington. How much or how little of the Associated Press report they would want to use was still uncertain Preparations were made to rely on it entirely, if necessary, and much of it had been put in type. An emergency intro-duction, with the fragmentary reports re-ceived as a basis, had been written in the office. Blake himself was nervous and anxious when the hour hand of the clock

slipped past eleven.
"With the wires clogged and working badly, he can't get much of a story in now anyhow," grumbled Blake. "We'll have to go shead without him." At 11:30 he gave instructions to use the

emergency introduction; at 11:40 he was calling Wellington names and swearing at everybody in the office; at 11:50-"Newton looping into the office !"

of the telegraph operators called out.

"Newton!" roared Blake. "What the devil does Newton want?" "Wellington must have got back there," suggested Rainey.

"Newton looping in on a second wire-on a third!" called the chief operator called the chief operator.

"Wellington's story coming on four wires!" A thrill went through the office, the

thrill of it. "I couldn't keep away from it if I tried. And, perhaps, you can help."
"What can I do?" she asked.
"Good old Wellington!" sighed Blake, forgetting that he had been consigning him to the perpetual furnace a few minutes be-

> "Newton on the long-distance!" came the cry from the next room, and Blake hur ried there.

"It's a girl and she wants you," said the "Wellington's girl !" exclaimed Blake. "Hello," said the girl; "is it coming?"
"On four wires," said the jubilant Blake.
"That's me," said the girl, proudly but

ungrammatically. "I got the wires myself, and went for the extra operators with a carriage.' "Good old Wellington's girl !" com-

mended Blake, that being his favorite form of commendation. "And I had the typewriters ready. Oh, it's all been splendidly improper.

"Bully old Wellington's girl !" said Blake. "Don't talk like that !" said the girl

"What's that !" "Get him!" instructed Wellington. "Mr. Wellington said you'd want some ly excavated as its neighbor, Pompeii, but "Take a carriage and hustle! I'll try to things for the fast mail edition that this is not so. It lies nearer to Naples, and pick up a photographer on the way to the wouldn't get through in time. He made notes of them, coming in on the engine, a mile a minute. You ought to see him !

dictating," the girl persisted. "The pic-

"Yes, yes, I know." He turned from "Two men here. to conditions along the road. Eight or ten quick! Take notes on this by relays and "What !"

"Give me the fast mail story."

"Ob, yes," Reading from the notes before her, she gave him the facts, even supplementing

"Tell Wellington to call me up when his story's finished," said Blake when her "All right," she replied. "But-ob,

Mr. Blake !" "Yes." "I don't want you to think this is so more cultivated class of people than the dreadfully improper. My brother's here, pleasure seekers of Pompeii, whose one

"Bring her back with you." he said. whereat the girl, who could hear this end of the conversation, gave a quick little gasp

they had the story. They pushed on Don't you believe it! Why, she told me curus and his doctrines. over the telephone that she was your girlwhere they hoped to find better facilities, yours, mind you! Just remember that if lyric poets of Greece, whose loss makes, per-

> She backed into a corner when he hung up the receiver and turned toward her. He followed. "Yes, yes, I'll go," she said, weakly sur

"You hear, Jack!" exclaimed Wellington. "You're going to lose a sister, and I'm going to take a wife back to town." But Jack, worn out, was peacefully sleeping on a table. - Elliott Flower in Col- fered.

Maple Sugar Season Near.

Very shortly the sap in the sugar maple tree will start up through the fibres of the trees, the farmer will prepare for the sugar making industry, and a week later fresh maple sugar and syrup will be used on thousands of tables over the western conti-

nent. The maple sugar industry is confined to practically three states, although 23 states reported making sugar last year. Pennsyl vania, New York and Vermont claim to make 80 per cent of the total manufactured in the United States. Over 12,000,000 pounds were made last year, which seems enormous, but nothing to be compared with the consumption, as a spurious article can

be bought oftener than the genuine. The making of maple syrup and sugar has lost much of its primitiveness. Many years ago it was manufactured by the farmer for his own use. Maple sugar was made at an early date in New England. It may have been the product of "necessity," or an inheritance from the Indians, al though maple trees grow in China, Japan, Canada and all northern countries, America alone having 100 varieties of maple,

but only one of the sugar maple. The Indians bad a spring "sugar making moon," but history does not specify whether they used it to good advantage or not. The old methods were crude and ruined the trees, which are now nourished, and the last to be cut. The sap was formerly caught in troughs, carted to kettles hung over roaring wood fires; and then boiled to sugar. Recent apparatus has enabled manu facturers to make the sugar as nearly white as common beet or cane sugar. The old sugar kettles are now curiosities, and one captured from Gen. Burgoyne at the battle of Saratoga, is preserved at the Bennington

Battle monument as a curiosity. The maple sugar season comes at a time of the year when the farmer has little else to do. It is still considered a social event in many neighborhoods, young and old alike gathering for the "boiling down" and the making of "spota." A good run in a season will net the farmer three pounds of pure sugar to a tree if the weather conditions are just fair. In some sec tions nothing but maple sugar is used, and not a pound of white gets into a household Everything is flavored with the fragrant magle. In some sections of Somerset and Cambria counties and in Allegheny county, Maryland, "camps" of 2,000 trees are not nnknown, and many trees accor many as three keelers. As the years roll by it is one of the best sources of income to the farmer, this maple sugar making.

-Haven't seen Brown for years. Is he doing well?" "Immersed in business, he tells me Literally up to his neck in it."

"What's he doing?" "He's a teacher in a swimming bath."

-What man is so like a duck?

THE REAL SIMPLE LIFE

My name is unwritten, My name is unsung In fact, I am only

A Little Girl's Tongue. You've heard of how busy Is Sir Bumble-bee

Well, 'twould make you quite dizzy To hear all of me. I work in the morning Ere breakfast's begun

Not missing a one. I work during school hours And the time meant for play And even at midnight And then people say,

I work every meal tim

That my mistress has nightmare Well, this I suppose Is the Stenuous Life Which is some people's por

If I have My say (And it's seldom I can.) The real Simple Life Will be my next plan!

-Elsie Parrish.

Herculaneum

Most people imagine that Herculaneum, buried by the eruption of Vesuvius in 79 A. D., has been as carefully and completeits site was the sooner covered with houses. Two or more villages now stand above it, or rather above the bardened mud seventy He's black and dirty and ton and muddy and wet and—and—splendid."

"Never mind that now."

"He couldn't call you up, because he's plore and to dig through this mud bouses were already in existence above the t. enches and tunnels then cut, and the excavators had to go with caution, and eventually to be contented with a very partial execution of their task. Indeed, one corner merely of the city was dug out, and then the matof trouble with the owners of the soil above. Little was done in the nineteeth century; and while excavation has been busy in other parts of the classical lands. and its neighbor, more happily situated for

the explorer, has been revealed in its entirety, nothing has been added to the knowledge of Herculaneum. Herculaneum was not so much smothered as overflowed by wave on wave of mud that preserved things by covering them up before einders and scorize had time to set anything alight. The town itself was inhabited, there is reason to believe, by a anxiety, as their inscriptions prove, was Blake laughed. To think of chaperonage that gladiators might be many and sport good. The paintings and sculptures that one's own knee serving as desk, but the problem of "the wire" was ever present.

One man was sent back early, to try to get the story started. Later, the others followed, and found the temporary telegraph lowed, and found the temporary telegraph have been recovered from Herculaneum are thoroughly explored contained numerous "She won't come," replied Wellington, rolls of papyri. Unfortunately, the house belonged to a man who specialized in Epicurean philosophy, for the rolls were all works of philosophers of this school. But

Under the mud waves there may lie the the tries to bluff you."

"Did she really say that?" asked Wellington and the really say that?" the wire in use from the station they had lington joyfully, whereat the girl tried to critics speak of them, but they are hardly just left, and local men had been ahead of think what she had said and remembered. lost writers of tragedy, such as Phrynichus, whose songs, so Aristophanes tells us, the veterans of Marathon hummed as they went through the streets at night, and of the Old Comedy, the rivals of Aristophanes himelf, Cratinus and Ameipsias. too, may lie the writers of the New Come dy, whose loss the ancient critics would have accounted as the worst we have suf-

Nor are the poets the only writers mer would wish to recover. The historian of Greece and Rome, because of his scant material, has to piece together much of his story from inscriptions and later authorities. He has the "impenetrable stupidity" of Diodorus an the anecdotes of Plutarch, but he would prefer something more con-

temporary. He would like to read the rise of Athens as recorded by Hellanious, and the story of Sicily as told by the "Pusillus Thueydides," Philistus, who took part in his own subject matter and was the contemporary of Dionysius. Not least, he would wish to see Alexander and success as they appeared to those with whom they lived. If his interests were more with Latin literature, he might then hope to find in Herculaneum the lost "Civil Wars" of Sallust and the lost "Decades" of Livy. Something, too, might be found that would

give new knowledge, if not of early Christianity, yet perhaps of the early Christians. To test these speculations one chief thing s wanting -money. The assistance of the Italian Parliament would be needed. Even then the sum required would be large, perhaps a quarter of a million, perhaps more. Want of money, and that alone, has prevented the attempt being made; but the money should be found somehow. Here is the greatest romance of excavation and discovery waiting .- [The Specatator.]

China on the March

Even China has been caught in the stream of progress. Not only has her military stem been reorganized under Japanese direction, so that an efficient fighting force with unlimited posibilities of development has been created, but steps bave been taken toward the establishment of a constitution. The astute Empress Dowager, having wisely resolved to take the lead in this direction, instead of waiting, like the Czar, to have her hand forced by a popular uprising, has been able to act with that leisurely deliberation so congenial to Chinese habits of mind. She has sent a commission abroad to study foreign methods of government, and has begun the preparation of plans for a deliberative asbly, which, it is expected, will be fully perfected in about twelve years. Mean-while she is introducing gradual reforms in the details of administrative machinery. Thus the progressive ideas that nearly cost the young Emperor his life seven years ago have now been adopted by the chief of the reactionists. Three ancient monarchies—Russia, Persia, and China, one of them the oldest and most populous in the world, and all together comprising a third of the human race—may be said to have been fairly started within the past year on the road of really no absolute, irresponsible monarchies so that "he who runs may read." left except Turkey, Morocco, and a few barbarous tribes, and even those have been so brought under the tutelage of the civil-ized powers that the despotic authority of the paper bound book, or 31 stamps for their rulers is bardly more than a name. -

Effect of Duration of Stress Strength and Stiffness in Wood.

It has been established that a wooden beam which for a short period will sustain safely a certain load, may break eventually if the load remains. For instance, woodbeams have been known to break after fifteen months nuder a constant load of but sixty per cent. of that required to break them in an ordinary shorttest. There is but little definite and systematic knowledge of the influence of the time element on the behavior of wood under stress. This relation of the duration of the stress to the strength and stiffness of wood is now being studied by the Forest Service of the United States Department of Agriculture at its timber-testing stations at Yale and Purdue universities. The effect of impact load or sudden shock; the effect of different speeds of the testing machine used in the ordinary tests of timber under gradually increasing load; and the effect of long-continued vibra-

To determine the effect of constant load on the strength of wood, a special appara-tus has been devised by which tests on a series of five beams may be carried on simultaneously. These beams are 2 by 2 inches in length, each under a different load. Their deflections and breaking points are automatically recorded upon a drum which requires thirty days for one rotation. The results of these tests extending over long periods of time may be compared with those on ordinary testing machines, and in this way safe constants, or "dead" loads, for certain timbers may be determined as to breaking strength or limited deflections.

The experiments of the Forest Service show that the effects of impact and gradually applied loads are different, provided that the stress applied by either method is within the elastic limit of the piece under test. For example, a stick will bend twice as far without showing loss of elasticity under impact, or when the load is applied by a blow, as it will under the gradually pereasing pressure ordinarily used in testing. The experiments are being extended to determine the relations between strength

under impact and gradual loads. Bending and compression tests to determine the effect of the speed of application of load on the strength and stiffness of wood have already been made at the Yale laboratory. The bending tests were made at speeds of deflection varying from 2.3 inches per minute to 0.0045, and required from twenty seconds to six hours for each test. The woods used were longleaf pine, red spruce, and chestnut, both soaked and kiln dried. From the results are obtained comparable records for difference in speeds

in application of load. A muliplication of the results of any test at any speed by the proper reduction factor derived from these experiments, will give equivalent values at standard speed. The tests also show concretely the variation of strength due to variations of speed liable to occur during the test itself. The results plotted on cross-section paper give a remarkably even curve as an expression of the relation of strength to speed of application of load, and show much greater

strength at the higher speeds. It is common belief among polemen that the continual vibrations to which telephone poles are subjected, take the life out of the wood and render it brash and weak. Nothing is definitely known as to the truth or falsity of this idea. Tests will be undertaken to determine the effect of constant vibration on the strength of wood. -Scientific American

Presidential Mothers and Wives.

Not many of the names in this list of mothers of the Presidents are known to fame, but who can say whether the sons would ever have been heard of if the mothers had not been such women as they were:

George Washington Mary Ball Jane Randolph lames Madison. Nelly Conway Eliza Jones Abigail Smith Elizabeth Hutchinso John Q. Adams. Andrew Jackson Martin Van Burer William H. Harri Maria Ho U. S. Grant..... Rutherford B. Haye James A. Ga Chester A. Arthur. Malvina Stone Frover Cleveland Anna Neal Elizabeth Irwin Benjamin Harriso

The Presidents' wives were as follows: John Q. Adams Andrew Jackso Hannah Hoes

Anna Symmes

Letitia Christian

Julia Gardiner

"Sarah Childress
"Margaret Smith John Tyler ... James K. Polk. Zachary Taylor. (Abigail Powers Caroline McIntosh Jane M. Appleton ...(Unmarried) ...Mary Todd ...Eliza McCardie Millard Fillmore. Franklin Pierce.. Andrew Johnson..... U. S. Grant..... Rutherford B. Hayes. Julia Dent Lucy Ware Webb Lucretia Rudolph. Ellen Lewis Herndo James A. Garfield. Chester A. Arthur Benjamin Harrison William McKinley. Theodore Roosevelt { Alice Lee Edith Kermit Carew

Willie's Lion Hunting.

"When I grow up," said Willie, "I am going to Africa and kill lions with a spear." "Why not kill them with a gun, Wil-

lie?" asked his father. "Why, all the natives kill lions with a spear, you know, and I wouldn't want to have the advantage of them. I would want to fight the licus hand to hand.'

"But suppose you run upon two lions," said Willie's father. "While you were fighting one hand to hand, the other could slip up behind and bite a piece out of the back of your neck." That put the matter in a new light. Willie thought over it a while and then

decided perhaps after all it was better to

he a private.

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