Rural Free Delivery an Aid.

At the recent International Good Roads Convention, at St. Louis, Hon. Frank E. Nevins, of the United States Postoffice Department, delivered an address in which he said:

"The establishment of the rural free delivery of mail throughout the country has produced a marked improvement in the condition of the highways. When there is a prospect of rural free delivery in a community, work immediately begins on the roads. There are now in operation 23,000 rural routes over which carriers travel 550,000 miles delivering mail to about 5,000,000 people. More than 15,000 bridges have been constructed over streams that would not have been built if it had not been for the establishment of the free delivery system. Nearly every portion of the country, where road conditions will warrant it, is now supplied with this service. But in many sections the bad conditions of the roads, or the lack of bridges, prevent the extension of the service. The rural carrier of a standard route is now expected to travel about twenty-five miles each day to earn his salary of $600 a year. He is required to furnish and maintain his own outfit and team, and to give a bond of $500 for the faithful performance of his duties. Experience has demonstrated that this distance is too great on account of the bad condition of the roads. So many carriers have resigned, thereby causing much confusion and labor in the department, that the Congress just adjourned has been compelled to add $170 a year to the salaries of the carriers of the country. This increase of salaries amounts to about $4,000,000 a year additional that the department has to pay to maintain this service on account of bad roads. Over a good graveled or macadamized pike road a carrier can easily make twenty-five miles a day six times a week. With the roads as they are, it is a question whether the next Congress will not be called upon to add another $4,000,000 to the salaries of the carriers.

"Under the road laws of most of the Western States at the present time work is done upon the roads in the fall by the various road districts, when there is no work to be done on the farms. In the spring this work disappears. Nothing permanent remains, and the roads are in as bad condition, or worse, than they were before. The cost of $2,000 to $6,000 a mile for the construction of hard roads in this Western country is too great, in most instances, for road districts, townships and counties to bear; neither is it right that they should bear the entire cost. The public at large, which shares directly or indirectly in the benefits, should contribute to the expense. There never will be good roads in this country until the National Government takes the initiative in this movement, and the respective States of the Union join in with liberal contributions, and this again is supplemented by local enterprise. Continental Europe, England and Ireland are covered with hard broad pikes built at the expense of the governments of those countries. No country in the world ever yet had or ever will have permanent and passable highways constructed and maintained by local authority.

"Sixty per cent of the population of this country lives in the cities and villages; 40 per cent lives in the country. It is not fair or just to place the entire burden of good roads upon the shoulders of the farmer. The general public shares directly or indirectly in the benefits and should bear the expense of an equitable tax for this purpose on all assessable values. The weight of it upon the individual would then be as light as a summer shadow. While this specter of taxation may frighten some of our skittish country friends and cause them to rear and plunge a little, they will find on closer inspection that the goblin is a harmless creation of the imagination. They will get back in benefits ten times more than they will pay out in taxes.

"Why some of our friends spurn Government aid when it is offered them I cannot understand. They claim to be opposed to it on principle, and can see no good in it. There are some people so constructed that when looking into a pool of water they can never see the sky and the clouds above it reflected on its surface, but only the mud at the bottom.

"This Government never fails to do the right thing in the end. It will not fail to do the right thing in this instance. The impetus given to this movement by a few progressive statesmen who introduced measures in Congress last winter authorizing national aid in the construction of highways, will ultimately produce the results aimed at. It cannot fail to do so because the public interest demands it; the progress of the age demands it; the welfare and development of the country at large demand it, and it is bound to come in spite of those who raise their voices in opposition to it."

Fewer Deaths by War.

If a French writer on military subjects is correct, the advocates of peace can no longer fall back upon war's increasing destructiveness to human life as an argument. On the contrary, he claims that experience shows that the greater the destructive power of modern rifles and artillery the less is the percentage of men killed. During the Seven Years' War between Germany and Austria and the dynastic wars of the eighteenth century the rival armies opened fire at a distance of one hundred yards, and after the first few volleys charged with the bayonet or pike. The average loss in these wars was seventeen per cent of the total number of combatants. During the time of the Civil Revolution and the Napoleonic era the losses were sixteen per cent. In the Italian war and Oriental war, with improved weapons, the loss fell to fourteen per cent. In 1866, in the war of Prussia against Austria, with improved needle-guns and greater distance, the losses were seven per cent. In the Franco-Prussian war the losses sank to five per cent. This is both fortunate and unfortunate, according to one's viewpoint. But the financial argument for peace cannot be gainsaid.

INVISIBLE HANDWRITING.

Transfer Left by Ink Which May Be Readily Developed.

In writing with certain forms of ink on ordinary paper, placing the sheet after thorough blotting in contact with a white sheet of paper, it is possible to make on this latter an invisible transference, which, as M. A. Bertillon has shown, may be rendered visible by the use of certain methods. In fact, a letter placed for several hours between the leaves of a book will leave its secret in this book, and a falsification in a ledger may be proved by the examination of the page against which the falsified page rests.

A Swiss investigator (R. A. Reiss, of Lausanne) has recently made investigations in reference to the above phenomenon and in reference to the conditions under which it may be produced. It appears that the formation of the image depends principally on the ink, although it was discovered that the latent image may be produced by nearly one-half of the inks in current use, out of thirteen different varieties of ink seven having produced a positive result. It further appeared that the formation of the image depended upon the presence of acids in the colored mixture, the gum and the sugar having no part in the phenomena, although the paper on which the writing has been placed gives different results. The best results were obtained with paper well sized and polished, for the reason that the contact in this case is closer, thus favoring the production of the image.

The duration of the contact is not necessarily long, in general about an hour, while in order to reveal the image two very simple measures are resorted to. The first method is to apply the back of the sheet on which the latent image is supposed to be a warm iron, an ordinary flatiron, which is held in place until the paper is slightly browned, after which the image will appear sometimes very clear and complete. The other method does not make any change in the paper to be examined, and consists in placing in contact with the latter a sheet of nitrate of silver photographic paper for several hours—six to twelve—the two sheets being exposed to the light. The photographic paper will completely blacken, but the latent image will stand forth very distinctly. It should be stated that the leaf on which a latent image exists loses this image by contact with water or alcohol.—Paris l'Illustration.

The Great Russian Lake.

Lake Baikal, which figures so much in the Oriental situation, is a somewhat remarkable body of water. Its name is a corruption of the Turkish Bei-kul, "rich lake"—the reference being, presumably to the valuable fish with which it swarms.

Lake Baikal is the third largest body of water in Asia. The Caspian and Aral seas are the two larger. Both are salt, however, while Baikal is fresh. It is, therefore, the largest fresh water lake in Asia, and the sixth in size in the world, the five Great Lakes of North America each exceeding it in area. Its waters occupy a remarkable depression in the vast plateau of Central Asia. The level of its waters is 1,300 feet above the sea, while the bottom of the lake is, in some places, more than 3,000 feet below the sea level. Its depth is, therefore, 4,500 feet in the deepest parts.

The lake is 330 miles long, and from nine and a quarter to forty miles wide. Its waters are a deep blue, and remarkably clear. There are a number of islands in it; the largest Olkhon, is forty-two miles long. There are numerous hot springs on the shores, and earthquake vibrations are frequent. The annual value of its salmon, sturgeon and other fisheries is about one hundred and sixty thousand dollars. Fresh water seals are abundant, and they are caught for their fur. It receives the waters of several streams, the main one being the Salnega River, eight hundred miles long. The upper Angara River, also of considerable size, enters its northeastern end. Its outlet is the Lower Angara, on which Irkutsk is situated.

The reason why the Siberian Railroad was not built around the southern end of the lake is that the solid rock of the mountains reaches to the water's edge, and the task would be herculean. Events in the East may compel it nevertheless.

Consolation.

It may be dat yo' sweetheart
Done lef' you feelin' blue,
But de melon coolin' in de well
Wid a ripe, red heart fer you!
—Atlanta Constitution.

Consider the other side. You may be unreasonable.

IN ANY GARB.

In olden times, when a girl grew up,
They tied her with ropes of gems,
They shackled her ankles and wrists with ore,
And they crowned her with diadems.

They soaked her tresses in perfumed oil,
They rubbed her with pastes and things,
Then brought her forth, as a queen, befit
To rivet the gazes of kings.

But now—a dip in the tumbling waves,
With a rest on the sands between,
A linen skirt, and a sailor hat—
And—she's just as much of a queen!

—Madeline Bridges, in Life.

Romance of a Barn-Yard

We were all sitting on the piazza, except those of us that were swinging in the hammocks among the trees; the sea wind was blowing over us, the birds were darting low here and there, and the bantams and the spring chickens and the big black Cochins were clucking and picking in the grass, watched over by the old King Charles, who redeemed us from vulgarity, and it was a scene of domestic comfort, as Aunt Helen said. Aunt Helen, by the way, became a very pleasant addition to the comfortable appearance of the scene, as she said it. She was just as plump as a woman ought to be when her next birthday may be her fortieth. She had a soft flush on her cheek, where the dimple was yet as fresh as when she was a girl, and the flush deepened sometimes into a real damask; her teeth were like rows of seed corn for whiteness, and her eyes were just as brown as brook water; only her hair—that was quite white. Lovely hair, though, for all that; she parted it evenly over her low, level forehead and above the yet black eyebrows; and we all declared, every day of our lives, that Aunt Helen was a beauty.

"I used to be," she had replied; "but that's all gone now. I have put my youth behind me."

Perhaps she had. But we young folks used to think differently when we saw Mr. Thornton coming up the road, and Aunt Helen's eyes resolutely bent on her work, but her color mounting and mounting, till the reddest rose that ever burned in the sunshine was not so rich. Mr. Thornton saw it, too, no doubt, for he always looked and looked intently all the way by. But the truth was—I shall have to tell you all about it if I tell you any—that when Aunt Helen was 20 years younger, she and Mr. Thornton had been lovers ever since they could remember. They had built their house at last, and her wedding dress was made. If she was a beauty, he was every inch her mate—I know he was, because he is to-day—one of the men it does you good to see, who look as if they could hold up the world if need be, and inspire you with confidence in their powers.

Now, what in the world do you suppose that, with their house furnished, and the cake baked, and a dozen years of intimate affection to bind them, Aunt Helen and Mr. Thornton found to quarrel about? She declared she wouldn't keep hens! And he declared that he wouldn't keep house! That was the whole of it, to condense the statement; one word led to more, and finally, in a towering passion himself, he told Aunt Helen that she had better learn to control her temper if she did not want to be a vixen entirely, and Aunt Helen took the ring off her finger and laid it on the table without a word and sailed out of the room, and refused to see him when he called in the morning, and sent back his letter unopened, and cut the wedding cake and put some of it on the tea-table and sent the rest to the fair. Perhaps, on the whole, Mr. Thornton might have been right. Exactly one week from that night Mr. Thornton was married to Mary Mabew, an inoffensive little body who would have married anybody that asked her, and she went into the house that had been furnished according to Aunt Helen's taste; and immediately afterward a hen-house of the most fanciful description of architecture rose on the hill behind his house, full of fancy fowl, and the little lawn was all alive with its overflow, and you couldn't go by the place without meeting a flock of cropple-crown or patridge Cochin, or white Leghorn, or black Spanish, flying up on each separate piece of fence to crow out Mr. Thornton's triumph—reversing the old tradition of the crower, and crying, "No women rule here!"

They say Mr. Thornton grew very old in a few years. His inoffensive little thing of a wife turned out to be a smart termagant, who led him a pretty dance. Perhaps she was dissatisfied with her piece of a heart; but then she knew that was all when she took it. He treated her always very gently—perhaps feeling he had done her some wrong in marrying her—and gratified her every wish, although, having cared nothing for her in the beginning, it is doubtful if he cared any more for her in the end. The end came after 18 years, when Mrs. Thornton was killed in a railroad collision, and her husband was left with four children on his hands; rude, noisy, ill-faring cubs, as all the neighbors said. If Mr. Thornton had ever impatiently chanced to think that his punishment had lasted long enough, he thought how it was just beginning, when he found himself alone with those children. He wondered that his wife had any temper left at all. He grew more bent, more vexed and worried every day, and one would hardly have recognized, people said, the dark and splendid Stephen Thornton of his youth, in this middle-aged, gray-haired man; and yet, to our eyes, he was still quite a remarkable looking person—perhaps more so from our associating him with the poetry in Aunt Helen's life, and making him an object of wonder as to whether or not they would ever come together again.

But there was little chance of that. We had met Mr. Thornton elsewhere, but he had never come across our threshold since the day he went out with his bride's ring. And Aunt Helen's peculiarity was that she never forgot. Could she, then, forget the words he spoke to her in his anger? Could she ever forget his marrying another woman in less than a week? It had been in that week and a few following that her hair had turned white. She had suffered inexpressibly; she had not slept a night, but she kept up a gay face. Perhaps she would have suffered if it had not been for our growing up about her. Her life was thus filled, every minute of it; she had but very little time to be lonely, to brood or mourn. She forgot herself in us. It gave her a quiet happiness, and kept her comely. And then she was too proud; whenever the thought thrust up its head, she shut the lid down, as one might say, and sat on it.

But one day—after the time when the doctor had said Harry was a hopeless cripple, and must lie on his back the rest of his life—Aunt Helen brought home a little basket from the county fair, and took from the wool within it two of the cunningest mites of chickens you ever laid eyes on.

"I hate them," said she; "they make me crawl; but they will amuse the dear child. They're African."

And so they did amuse him and delight him, as he lay on his lounge in the bay window and watched them growing up, full of business. And that was the way, by the way, that we came to have chickens round the front piazza. One night, a year after, when the bantams were quite grown people, somebody dropped over the fence a pair of big black Cochins, that stalked about as if the earth was too good to tread on, or as if they were afraid of crushing a bantam with the next step. Of course we knew where Cochins came from—for nobody else in town had any—but no one said a word. Only it was sport the next day to peer round the corner and see Aunt Helen, with a piece of bread in her hand, in doubt whether to have anything to do with those fowls or not, twice extending her hand with the crumbs and snatching it back again, and at last making one bold effort, and throwing the whole thing at them, and hurrying into the house. But from that moment the ever-hungry Cochins seemed to regard her as their patron saint. She never appeared but they came stalking gingerly along to meet her, and at last one made so bold as to fly up and perch on the back of her chair, on the piazza. Of course he was shooed off with vigor—with a little more vigor perhaps because Mr. Thornton had at that moment been passing, and had seen this woman who would never keep hens presenting the tableau.

It was two or three days after that, that Aunt Helen, coming home at twilight from one of her rambles by the river bank, was observed to be very nervous and flushed, and to look much as if she had been crying.

"It's all right," said our Ned, coming in shortly after her. "I know all about it. I've been setting my eel traps; and what do you think—she met old Thornton——"

"Ned!"

"She did, indeed. And what'll you say to that man's cheek? He up and spoke to her."

"Oh, now, Ned! Before you!"

"Fact! Before me? No, indeed; I lay low," said Ned, with a chuckle. "But bless you, they wouldn't have seen me if I had stood high."

"For shame, Ned! Oh, how could you—and Aunt Helen!"

"Guess you'd have been no better in my place," said the unscrupulous boy. "But there, that's all. If I could listen, of course you can't."

"Oh, now, Ned, please!" we all chorused together.

"Well, then. He stood straight before her. 'Helen,' said he, 'have you forgotten me?' and she began to turn white. 'I have had time enough,' said she.

"Oh, you ought not to have stayed, Ned!"

"You may find out the rest by your learning," said the offended narrator. "I should like to know how I was going to leave. Only I'll say this, that if Aunt Helen would marry old Thornton to-day—she wouldn't touch him with a walking-stick!"

To our amazement, on the very next afternoon who should appear at our gate, with his phaeton and pair, but Mr. Thornton; and who, bonneted, and gloved, and veiled, should issue from the door, to be placed in that phaeton and drive off with him, but Aunt Helen! Ned chuckled; but the rest of us could do nothing but wonder.

"Has she gone to be married?" we gasped. And Lill and Harry began to cry.

"Well, I'll tell you," said Ned, in mercy. "He said there'd never been a day since he left her that he hadn't longed for what he threw away!"

"Oh, how wicked!"

"She told him so, very quietly and severely—I tell you Aunt Helen can be severe—and to be silent on that. 'Forever?' said he. 'And ever,' said she. 'It is impossible,' said he. And then he went over, one by one, a dozen different days and scenes when they were young; and if ever a fellow felt mean, I was the one."

"I should think you would," we cried with one accord.

"Now look here," returned Ned. "If you want to hear the rest, you keep that sort of remark to yourself. It was too late to show myself, anyway. And I'll be blamed if I'll say another word if you don't every one acknowledge you'd have done just as I did."

"Oh, Ned, do tell the whole. That's a good boy."

"Well, she just began to cry—I never saw Aunt Helen cry before. And then it seemed as if she would go distracted; and he begged her not to cry, and she cried the more; and he begged her to marry him out of hand—I know just how to do it now; only it doesn't seem to be a very successful way—and she shook her head; and he implored her, by their old love, he said, and he wiped her eyes, and she looked at him, and gave a laugh—a hateful sort of laugh.

"'Then,' said he, 'if you will not for my sake, not for your own sake, then for the sake of the motherless children, who need you more than ever children needed a mother yet, and who—who are driving me crazy!' And then Aunt Helen laughed in earnest, a good, sweet, ringing peal; and the long and short of it is that she has driven up to the Thornton house to-day to look at the cubs and see what she thinks about them. Maybe she'll bring them down here—she's great on missionary work, you know."

"Well, I declare!" was the final chorus. And we sat in silence a good half hour; and by the time our tongues were running again Aunt Helen had returned, and Mr. Thornton had come in with her and sat down upon the piazza step at her feet, but not at all with the air of an accepted lover—much more like a tenant of Mohamet's coffin, we thought. And, as I began to tell you, we were all sitting and swinging there when Aunt Helen exclaimed about its being a scene of domestic comfort. As she sat down the big black Cochin hen came to meet her, and Aunt Helen threw her a bit of water-cracker, a supply of which she always carried about her nowadays.

"Why, where's your husband?" said she to the hen.

"There he is," said Ned. "He's been up alone in that corner of the grass the whole day, calling and clucking and inviting company; but the rest haven't paid the least attention to him, and are picking and scratching down about the cannas."

"Oh, but he's been down there twice, Ned," cried Harry, "and tried to whip the little bantam, but it was a drawn battle."

"Well, he ought to have a little vacation, and scratch for awhile," said Aunt Helen. "He has picked and scratched for his hen and her family all summer."

"And so's the banty," said Ned. "The bantam's the best; he's taken as much care of the chickens as the hen has, any way; and he never went to roost once all the time his hen was setting, Mr. Thornton, but sat right down in the straw beside her every night."

"A model spouse," said Aunt Helen. "They are almost human," said Mr. Thornton. And so we sat talking till the tea-bell rang, for Mr. Thornton was going to stay to tea, he boldly told us; and we saw that he meant to get all the young people on his side by the way he began to talk to Ned about trout and pickerel, and about deep-sea fishing; but when he got to eel-traps, Ned's face was purple, and he blessed that tea-bell, I fancy. However, Mr. Thornton might have found that it wasn't so easy to range the young people on his side, if he had made a long-continued effort. We enjoyed a romance under our eyes, but we had no sort of notion of his taking our Aunt Helen away.

We were just coming out from tea, and were patronizing the sunset a little, which was uncommonly fine, and I thought I never seen Aunt Helen looking like such a beauty, with the rich light overlaying her like a rosy bloom, when John came hastening up.

"I just want you all to step inside the barn door with me if you please, marm," said he. And we went after him to be greeted by the sweet smell of new-mown hay, and to be gilded by the one great broad sunbeam swimming full of a glory of motes from door to door. "Do you see that?" said John. It was a flock of the hens and chickens on their accustomed roosts. "And now do you see that?" he said; and he turned about and showed us, on the top rail of the pony's manger, the big, black Cochin also gone to roost, but separately—and his wife beside him? No, but little Mrs. Bantam!

"That's who he's been clucking and calling to this whole afternoon," the wretch!" cried Ned.

"And now look here," said John; and we followed him into the harness room, where the chickens had chanced to be hatched, and there, in the straw on the floor, sat the disconsolate little bantam rooster, all alone, with his wings spread and his feathers puffed out brooding his four little chickens under his wings—the four little chickens deserted by their mother.

"I declare! I declare" cried Aunt Helen, as we came out into the great motey sunbeam again; "the times are so depraved that it has really reached the barnyard. The poor little banty and his brood! Why, it's as bad as a forsaken merman!"

"Only not so poetical," said we.

"Helen," said Mr. Thornton, "it's exactly my condition. Are you going to have pity for that bird, and none for me? Are you going to leave me to my fate?" And in a moment, right before us all, as she stood in that great red sunbeam, Mr. Thornton put his arms round Aunt Helen, who, growing rosier and rosier, either from the sunbeam or something else, could do nothing at last but hide her face. "Helen," he said, "you are certainly coming home with me?" And Aunt Helen did not say no.—Waverley Magazine.

GEOMETRY EXCITES THEM.

Explanation of Quarrelsome Couple on Trolley Car.

"Do you see those two?" said the conductor of the suburban trolley car to a man on the back platform, "that man and women in there who are pawing so?"

The man answered that he did. He might have said that he had been watching them for the last fifteen minutes, and had been wondering whether they were sister and brother or man and wife, and whether they were candidates for the divorce court or were in a dispute over their parents' will.

"They go on that way every time they come to town," the conductor continued, "and they don't seem to care whether people get onto them or not. It used to bother me for a time.

"Other folks would come out to me and ask who the quarreling couple were, and I couldn't tell them. Once an old man declared that they were crazy and insisted that I should put them off the car, as he couldn't read his newspaper in peace."

All this time the man and the woman were deep in their argument. The man held a visiting card in one hand, and on the back of it had written or drawn something.

The man on the back platform with the conductor craned his neck and managed to see that the markings on the card were mostly straight lines, and he came to the conclusion that they were brother and sister after all, and that the lines represented the boundary lines of some property they were quarreling over.

But the conductor, who had been up the car collecting fares, now returned and explained the mystery. The couple were man and wife. The man is an instructor in geometry in a large private school, and he has a wide reputation in his specialty.

His wife, however, is quite as good at geometry as he, and wherever they go their chief topic of conversation is the hobby of both—geometry. The lines on the card described some geometrical problem, and the discussion was over the best way to solve it.

"They go on awful sometimes," the conductor explained. "They get so excited over their hypothenuses and angles and such that they forget where they are going, and if I don't happen to know where they want to get off they will sometimes go half a dozen blocks by."

Perfectly Natural.

"Well, and how does my son get on?"

"He is one of the best students at school, sir," replied the teacher. "I have no complaints to make on that score."

"That was the way with me when I went to school. I'm glad he is taking after his father."

"But he is very unruly at times, Mr. Hardcastle, and frequently has to be reprimanded for fighting."

"Well, I suppose it is natural that he should have some of his mother's striking characteristics."

The Plodder Wins.

I have often met the fellow
(So have you!)
Who proclaimed in accents mellow
What to do.
But whene'er we sought assistance
In a task that took persistence
He'd forgotten our existence—
Sad, but true!
Many preach who never practice.
As of old,
And the unpoetic fact is
We were "sold."
Just dispense with airy graces;
In success—as other races—
'Tis the plodder gets the places
And the gold!
—New York Press.

A Negro and English.

You are almost an octogenarian, sah," said the semi-educated, young, yellow negro, pompously.

"Wha-what's dat yo' says?" snapped the venerable but unlettered darkey.

"I specified, sah, that you are almost an octogenarian."

"Well, don' yo' do it ag'n, boy, or I'll done bust yo' head wid my stick—yo' heads my prognostification?"

A woman who was lately divorced is quoted as saying: "There are too many men in the world to be unhappy with one of them."

Ever remark how timidly and hesitatingly a bald-headed man takes off his hat?