several months studying signals which is says the people on Mars have been sending to this earth. These signals consist of a series of flash light dots and deshes. They appear to resemble the heliograph signals used by an army to send news from one monntain top to another.

By means of a simple light, which may be turned on and off with mathematical accuracy, it is possible to make up a complicated code whereby long and detailed anything known to us.

They have developed an enormous and perfect system of communication other than the ray of light. That this is the means which people of Mars have finally adopted for opening communication with us there appears now to be no reasonable doubt, according to the statement of Sir Francis Galbon.

Industriously trying to open communics and industriously trying to open communication with us, that they are studying us with us, that they are condition of affeirs on this earth. The vast public works which Schioparelli and Lowell have discovered on the surface of Mars accuracy, it is possible to make up a complicated code whereby long and detailed anything known to us.

They have developed an enormous and perfect system of irrigation, building gigantic canals that cover the surface of Mars and perfect system of irrigation, building gigantic canals that cover the surface of Girls upon the Farm," by Miss Susie A. Crawford and Mr. Jno. R. Tompkins, "They said I was a sight. But some time, when I'm ode I bet you that I can—I'm of the works which to have a state of civilization far beyond anything known to us.

They have developed an

Edison believed for some time that the people of Mars were trying to telegraph to us by means of electrical currents. For the purpose of taking up these mes-sages, which, after travelling millions of miles of ether, were necessarily weak, he built the largest receiver in the world. This consisted of many miles of wire wrapped around the base of Ogden mountain, in New Jersey, which, consisting almost altogether of iron, acted as a giant

Mr. Edisoh attached a microphone to these wires, and, putting his ear to the diaphragm, noticed a long series of eismic mutterings that were strange and unearthly. Mars was then close to the earth and unusually active, as the observations of Percival Lowell at Flag staff Ariz., disclosed. Yet, although there appeared to be little doubt that magnetic currents noticed by Mr. Edison vere transmitted from this interesting planet, they were so coofused and mixed that no

Few, however, that the light signals, instead of the magnetic signals, sent from Mars have been studied by a painstaking ing discoveries as to just what these discoveries mean. The light signal on Mars was first noticed in the Lick telesbope,

the biggest spy glass on earth.

It was seen to flash out in the central zone of the planet soon after Mars rose into the evening sky. That was two years ago. The signal light at that time was apparently in a crude state, compared to its present condition. It was only noticed at the Lick observatory on two successive evenings, and it then went

During the past summer, however, this flashlight on Mars has been unusually active. The Martian telegraphers seem to have got the bang of their instrument—which must be built upon a gigantic scale—and to have devised a sucsful method of turning on and off the

light in the immense area over which it must extend.

When first studied by Sir Francis Galton the signals from Mars to the earth appeared to consist of an unrelated and meaningless series of flashes, which might

the earth and mars. He resolved, however, to make these flashes the subject of prolonged observation and study.

In order to score pregnanent record of the flashes, Sir Francis Galton, working in one of the great European observatories, constructed an apparatus which was placed next to the telescope he used. In this machine a long strip of telegraph paper was slowly drawn by clock work under a hinged pencil.

Upon this pencil Sir Francis Galton rested his finger. When the flash began, he pressed with his finger and the pencil made a mark on the paper anrolling be-

made a mark on the paper anrolling be-neath it. When the flash ceased, he lifted his finger, the pencil was instantly raised and a blank space was left on the paper strip. For many weeks Sir Francis Galton, working all night while Mars was although they were meaningless to him.
when, however, he began to study the
paper strips which he had collected, he
began to notice a certain order and regularity in the recurrence of some of th signs. Then by an analytical process he discovered that these telegraphic ribbons showed that three, and only three, different signals were being employed by the Martian operators.

These signals differed only in their lengths and resembled the dots and

second and a quarter and that the dash lasted two seconds and a half. The line, or longest dash sent by the flash light on Mars, lasted five seconds. Of the thousands of impressions made by Sir Francis Galton, every one belonged to one of

these classes.

Then an other discovery was made by the English scientist. He succeeded in separating the messages into words. After every group of dots and dashes on the pap-slip, Sir Francis Galton found that there was a considerable space, when the dots and dashes would begin again.

These spaces indicated the division of one word from another. At greater inter-

vals there was another and longer space. This indicated the beginning of a new paragraph.
Sir Francis Galton found that the interval between letters was one and onewords were just twice as long, while the intervals between paragraphs were six seconds in length. A further scrutiny of these mysterious telegraph messages from Mars disclosed the fact that the total number of words of one letter was three, of two letters nine, of three letters twen-

ty-seven, of four letters eighty-one and of five letters two hundred and forty-Sir Francis Galton has also found that the average time occupied in signalling these words, including the three seconds pause at the end of each, are six, ten fifteer and twenty-four seconds respectively. He has not yet been able to decipher the exact meaning of these words, which the Martian telegraph operators have been flashing towards us, but that meant to be read by the

the earth he has no doubt.

Just how the light is made that carries its rays over the immense distance separating Mars from the earth remains a mysit must cover hundreds of square miles where millions of incadescent lamps may where millions of incadescent lamps may be burning, having stated that that was the only way in which the inhabitants of the earth could return a flash light message to Mars. The strongest and largest light now in use on this earth would be "Can I have some more cake?"

useless in tempting to communicate with the people of Mars, who could not see it even with the most powerful tele-

the flow of great bodies of water into these artificial canals is plainly disclosed by the new colors taken on. Soon vegetation commences along the banks of the tion commences along the banks of the canals, and the advancing season, as it progresses towards north and south, while the snow caps recede, is revealed by vast stretches of territory which turn from an orange brown to bright green.

So perfect is the Martian system of irrigation that all the said stretches on its suf-So perfect is the Martian system of irrigation that all the arid stretches on its suface are reached. Every acre appeares to be highly cultivated. In the spring the whole surface presents an aspect of brilling. Orange, horticulturist, to assist in the discussion or retention of fertility and stable management of cattle, and Prof.

Jno. Craig, horticulturist, to assist in the discussion upon fruit growing.

This turns to a golden orange as the crops ripen. Then the harvest is gathered, the canals dry up, and and the snow caps on both poles can be seen in the telescope to advance to result the country. to advance towards the equator.

The amazing phenomenon, all apparently the result of the high state of development of the people of Mars, has been studiously observed and graphically described by Mr. Percival Lowell, of Harvard unitable of the people of the people of Mars, has been studiously observed and graphically described by Mr. Percival Lowell, of Harvard unitable of the people of the peop

appear an easy matter.

If they can build canals athousand tures larger than Sues canal it is likely that they have telescopes much more powerful than the Lick, and that, knowing just what our life upon this earth is like, they are making every effort to open up communication with us. Mr. Percival Lowell has recently gone to New Mexico to still further study Mars, and Sir Francis Galton is attempting to decipher the meaning of the Martian messages he has recorded.

A Southern Corn Pest.

Entomologist Howard of the Agricul Entomologist Howard of the Agricul-tural department, in a recent circular on the larger corn-borer, says that the pest will have no chance for its life in the North, where careful and thorough meth-ods of cultivation are followed, but in the South it has already done more or less damage in most corn fields from Alabama to Virginia. Mr. Howard reports having seen more than 50 holes in a single stalk in South Carolina and in Virginia last year, a single planter estimates hi loss at more than \$500. The insect i identical with the sugar cane borer of Louisiana, and is found in all Southern States as far North as the Potomac river and as far West as Kansas.

and as far West as Kansas.

The adult insect issues from the old cornstalks in the spring. Soon after the young corn comes up it lays its eggs upon the leaves near the axle and the young as you upon hatching penetrates the stalk at or near the joint and commences to tunnel, usually upward through the pith. The growth of the borer is rapid and it is very active, frequently leaving the stalk, at one place and entering at another. at one place and entering at another, making several holes in the course of its growth. When ready to transform it bores to the surface of the stalk making a hole for the exit of the future moth, then changing to the pupa state.

The etomologist says that where the old corn stalks are systematically removed from the field and burned after the harvest or during the winter, or where a

the corn stalk borer will never become a serious pest, and the Virginia and South

"Now, Algy, what are going to have?"

he was asked.

Another piece went the way of the

"Yep, cake."
"Well, you can have one more piece,

but I know you will have bad dreams."

The next morning early, Algy appeared at the door of his late host. ed at the door of his late host.

"I just came over to tell yot that I didn't dream nothing," he remarked.

"Can I have some more cake?"

"Can Commercial Traveller.

The Annual Meeting of the F. and D. Association of N. B., will be It is believed, as the Marians keep on industriously trying to open communication with us, that they are studying us

"The Stable Management of Cattle," by Messrs. W. L. George and D. C. Parent. The subject of Agricultural Education will also be discussed.

Mr. Geo. W. Forrest, superintendent of the Maritime Experimental Farm, will make a report upon some features of the work under his charge. Prof. F. T. Shutt, chemist to Dominion Experiment-

discussion upon fruit growing.

Everybody is invited to attend and join the Association. The membership twice in each discussion. Ladies are particularly invited. Reduced rates on all railways. Buy one way first-class tickets over the I. C. R. and C. P. R. and

ask for standard certificate. BUTTER AND FRUIT EXHIBIT. by Mr. Percival Lowell, of Harvard university, whose investigations have added numerous Martian canals to those previously discovered by Schiaparelli. To a people capable of conquering adverse nature and achieving the gigantic engineering triumphs of the Martians, the sending triumphs of the Martians triumphs of the

W. W. HUBBARD,

He Wanted It Cheaper.

that you want from a private dining room to a cafetiria help yourself counter. And the men in search of something to eat had

wandered in among the private dining rooms on the second floor.

After he had settled himself comfortably in his chair and had secured the attention of a waiter he glanced at the bill of fare, and the next minute he straightened up as if he had received an electric shock. "Roast beef, 45 cents!" he exclaimed.
"Do you serve a whole cow for an order

first floor.
"Roast beef, 30 cents," he said, looking at a bill of fare before taking his those of a former trial at the Vermont seat. "That's before. I've come lown station, and confirm the opinion of many

15 cents' worth of stairs."

Then it was that a brilliant idea occurred to him, and he beckoned to the head waiter. "What's in the basement?" he asked. "Our cafetiria," was the reply.
"How much is roast beef down there?

"Twenty cents."
He started for the basement, but stop "Say," he said, "if you've got a sub-cellar I'd like to eat there."—Chicago

The Drummer's Latest.

The drummer always brings the latest Carolina farmers have it in their hands to

Carolina farmers have it in their hands to

Take a spool of white basting cotton. Cardina frames have kin their hands to cheek it at any time by pursuing thee hands of the kin their hands to cheek it at any time by pursuing the hands of the kin their hands to cheek it at any time by pursuing the hands of the county at a specific to the county of the hands of the county at a specific to the county of the hands of the county at a specific to the county of the hands of the county at the grant of the specific to the county of the hands of the play. The specific to the county as a speci

"Cake."

He was given a generous slice, and in an incredibly short space of time it had disappeared.

"What will you have now, Algy?" he whole section of the house got onto it. they didn't know whether to laugh at me or him, but sat and looked on amazed the enectacle. At last the stranger at the spectacle. At last the stranger trait painter has almost as great a reputagave one frantic rip and yanked out about tien for joking as for taking excellent gave one frantic rip and yanked out about 11 yards in one bunch, and as the cotton got caught around his watch chain, over got caught around his watch chain, over in his heir and filled his its finished.

this (the chapel) and it ought not to be likenesses. One evening he was speaking difficult to raise that amount for one to difficult to raise that amount for one to whom we are all under obligation, who its finished.

Telemachus" and had been much important to be difficult to raise that amount for one to whom we are all under obligation, who

care for any more to-night. I am honestman in appearance. His face was as red as fire even to his ears. He looked at me and then at the spool. He changed a large for tune! Do you mean that it is so

Getting to be a Man.

Twish my voice was hoarser
To talk like Uncle Dan,
Because I want to hurry
And git to be a man!

But couldn't do it quite,
It made me awful dizzy—
They said I was a sight.
But some time, when I'm older
I bet you that I can—

I've got on pa's suspenders—Wisht I had whiskers too,
And that my feet was bigger,
And schoolin' was all through
Wisht Edison. or someone,
Would come out with a plan
To help a boy to hurry,
And git to be a man!

termine the best method of perserving the corn plant for winter use. Four methods were tried. First, whole ensilage was made by running the newly cut corn through a cutter, reducing it to 1-2 inch lengths, then putting into the silo. Second, the ears were husked, cribbed, dried, ground, cob and all, and fed in

Samples from the materials preserved by the different methods were analyzed, and the fodder was fed to a herd of 14 milk cows. It was found that each of the methods perserved about 4-5 of the dry matter harvested, the loss from each being prac-tically the same in quality and character. The fodders kept in the shock lost more and more dry matter as the winter progressed. The ears in the silo during the last test lost more of their food value than those preserved in any other way, this being the reverse of a previous test. The relative cost of placing the same amount of dry matter in the manger was greatly in favor of whole ensilage. Time and money spent in husking and grinding the ears were wasted, as better results were obtained when the ears were left on the stock. The ensilages were relished much better by the cows and they did

whole ensilage ration.

In the main, these results agree with that nothing is equal to ensilage as rough winter dairy food.

Resolution of Condolence

County Council held on the 19th inst, Councillor Gilbert moved the following

That a committee be appointed to prepare a memorial, suggestive of our sympathy for the family of our late and highly esteemed sheriff, T. W. Perry, now deceased, and expressive of the loss sustained by this Council and the County at

with. Hip: rip: went the thread. Hand over hand he yanked it in. The aisle was full of it. "For heaven's sake! will it never end?" said he above his breath.

I sat perfectly still and ran the spool while he pulled. How I wanted to yell.

I never the thread. Hand do tender to the widow and family of the deceased, our sincerest sympathy in their deceased, our sincer

A Delicate Compliment.

Only that it is filled with suberb ivory

madame,' returned the artist, with his

usual gravity. - Youth's Companion.

Why His Wife Didn't Object.

"Really, boys, I have to quit," said the man with the biggest stack of chips in front of him as he gathered in another jack pot.

"Oh, come off, that's not square," declared the biggest loser.

"You've got all the chips. Aren't you going to give the rest of us a show?" "That's not it. You know I don't care for your money, but-" "You're getting it."

lows are single It is 12 o'clock now, and if I don't get home I will be in a pretty mess. As it is I expect to find your own house do as you please; but in my mother in-law and my wife waiting for me. You are not married."

had just returned. "And you are going to play all night?"

"If I want to, "And drink?" "Bet your life." "And smoke?"

"Your wife won't say anything to you when you get home?" "Not a word."

Doesn't she object to your playing poker, drinking and smoking all / night?" "Oh, I don't known. I am not worrying about it. Stay all night!" "There; you see it's a bluff!" declared

This is a true English gliost story of an unconventional kind. A young lady arrived late at night on a visit to a friend.

This is a true English gliost story of an unconventional kind. A young lady arrived late at night on a visit to a friend.

Weeping for him in his distant native She awake in the darkness to find a white figure at the foot of the bed. While she watched the bed-clothes were suddenly watched the bed-clothes were suddenly whisked off and the apparition vanished.

After an anxious, not to say chilly — See! his arms are lifted to heaven, he night, the visitor went down with little prays—how wildly!—for mercy; hot fever rushes through his veins. He moves not; appetite for breakfast. At table she was his eyes are not set in their sockets; dim The waiter said that was the regular price.

"Well, when I want to be robbed," returned the man, "Ill go out and hire as thug to do it. Just now I'm only after lunch, and I didn't think to bringmycheck-book along."

The waiter politely suggested that the prices were foot quite so high on the first floor, where the service was good or bad, as he never ate it, and then he started for the first floor.

The patron declared that he didn't care whether the service was good or bad, as he never ate it, and then he started for the first floor.

The waiter said that was the regular price.

The waiter said that was the regular much better by the cows and they did better upon them.

Equal quantities of milk and butter, and the better by the cows and they did friend of the family, who had, she learned, also been sleeping in the house. He complained of the told. 'I hope you will excuse me," he said to the hostess, "but I found it so cold during the night that, knowing the soom next mine was unoccupied, I took the liberty of going in and carrying off the bedclothes to supplement my own.," The room, as it hap ensulinge and meal to 100 pounds obtained in the greatest quantity of dairy product. There were but 91 or 92 pounds of milk and butter produced by a given amount of stover ensilage and meal to 100 pounds obtained in the started for the first floor.

"The waiter politely suggested that the prices were foot quite so high on the first floor, where the service was good or bad, as he never ate it, and then he started for the from the same amount of dry matter in whole ensilage and meal to 100 pounds obtained friend of the family, who had, she "learned of the family, who had, she "learned the house. He complained of the bode. 'I hope you will excuse me," he said to the house. A groan runs through the assembly; so that, knowing the soom next mine was unccupied, I took the liberty of going in and carrying off the bedclothes to supplement my own.,' The room, as it hap here look, so inspired her manner, that what she described asce

The Mines of Canada.

The Rossland Miner reports that from January 10 to January 16 inclusive the shipments of ore from mines at Rossland to smelters were as follows:-

personal matters, so he was inclined to be given by Mentor to Telemachus. "He Mr. Moody is averse to speaking upon anything about this, you know. The matter has been discussed for some time among some of my friends, but I cannot say what has been done. The chapel, when built, will practically complete the chain of Northfield School buildings, which has been evolved during

the past 15 years.

The Bridal Wine Cup.

A subscriber to the Family Herald sends us the following story, which she read in a paper some years ago, with a request that it be reproduced.

Pledge with wine, pledge with wine, cried the young and thoughtless Harvey

'Pledge with wine,' rang through the bridal party.

The beautiful bride grew pale, the decisive hour had come. She pressed her white hands together, and the leaves of

the bridal wreath trembled on her brow; her breath came quicker and her heart beat wilder. "Maybe I am. But I really must quit. You see, I am married. You fellows are single. It is 19 o'clock tone, going toward his daughter, the 'com-

my mother in-law and my wife waiting for me. You are not married."

"I am," declared the man whose luck had just returned.

"I am, between the man whose luck had just returned."

"I am, between the man whose luck had just returned."

"I am, between the man whose luck had just returned."

"I am, between the man whose luck had just returned."

"I am, between the man whose luck had just returned."

"I am, between the man whose luck had just returned."

"I am, between the man whose luck had just returned." gracefully accepted the crystal tempter and raised it to her lips. But scarcely had she done so when every hand was ar-

rested by her piercing exclamation of, 'Oh! how terrible!' 'What is it?' cried one and all, thronging together for she had slowly carried the glass at arm's length, and was fixedly

regarding it.
'Wait,' she answered, while a light wait, she answered, while a light which seemed inspired shone from her dark eyes; 'wait and I will tell you. I see,' she added, slowly, pointing one finger at the sparkling ruby liquid, 'a sight that beggars all description; and yet listen, I will paint it for you if I can. It is a lovely spot tall mountains crowned with verdure rise in awful sublimity around; a dried, ground, cob and all, and fed in connection with the stalks, which had been previously cut and made into ensilage; this was called stover ensilage and meal. Third, the fodder was preserved about the way he has his wife trained, in large shocks and before feeding was run through a cutter, ears and all, and cut into 1-2 lengths. Fourth, the corn was husked from the fodder, ground with the scale and fed with the stover, after it will tell me how he manages it."

'There; you see it's a bluff!" declared the well and bright flowers grow to the water's edge. But there a group of Indians gather; they flit to and fro, with something like sorrow upon their dark brows. And in their midst lies a manly form, but his cheek, how deathly! what I will do, I'll give my stack if he way he has his wife trained, but I can't do it," returned the man with the biggest stack of chips, "but I tell you what I will do, I'll give my stack if he way he has his wife trained, but I can't do it," returned the man with the biggest stack of chips, "but I tell you what I will do, I'll give my stack if he way he has his wife trained, but I can't do it," returned the man with the biggest stack of chips, "but I tell you what I will do, I'll give my stack if he seek wild with the fitful fire of fever. One friend stands before him—nay, I should say kneels, for see he is pillowing

"Done!" cried the man whose luck had turned, as he reached for them. "My wife is out of town visiting some friends."—Chicago Times-Herald.

In a Minor Key,

Look how he throws back the damp curls! See him clasp his hands! Hear his thrilling shrieks for life! Mark how he clutches at the form of his companion, imploring to be saved. Oh! hear him calling pitcous.

party shrank back, the untasted wine

Dead, she repeated again, her lips quivering faster and faster and her voice more broken; and there they scoop him a grave; and there, without a shroud, they lay him down in that damp reeking earth, the only son of a proud father, the only idolized brother of a fond sister. There he lies, my father's son, my own twin brother, a victim to this deadly poison. Father! she exclaimed turning suddenly while the tears rained down her beautiful cheeks, 'father shall I drink it

field, and it is confidently expected by the committee that the whole sum will be raised by Feb. 5, so that the chapel may be presented as a birthday gift.

Mr. Moody's English friends also are decel interested in this wester, and the decel interested in the common dimetalty of chosing a name for the babe arose. Multitudes of suggestions only confused the young parents the more, until at last it was proposed to cast Rev. Dr. F. B. Meyer, the celebrated English Evangelist, who will arrive in New York Feb. 3, has been specially active. The purpose is to raise half the amount in each country, Dr. Meyer, writing from London recently, expressed the feeling of Mr. Moody's English friends as follows: "For years he has wished for this (the chapel) and it ought not to be this (the chapel) and it ought not to be the country that amount for one to be a country of the country. pressed by the description of Ulysses Beautiful forehead and eyes, returned the artist, cocisely, 'handsome nose fine chin, mouth like an elephant's!

personal matters, so he was inclined to be reticent beautiful forehead and eyes, returned to be reticent yesterday. "Well really," he said was gentle of speech, beneficent of mind." "The most patient of men." "He is the anything about this, you know. The matfriend of truth. He says nothing that is false, but when it it necessary he concedes what is true. His wisdom is a seal upon his lips, which is never broken save

for an important purpose."-Hamilin

Garland in McClure's.