

South America has the greatest unbroken extent of level surface of any country in the world.

There are 40,000 blind persons in France, nearly half of them from what is now known to be preventable.

Great indignation is expressed in Paris because for two years mining problems that cannot be solved have been set for the examination of the Ecole Polytechnique through the blundering of the examiners.

A writer in the St. James Gazette attributes the "anxious look and unwholesome pallor," the nervous exhaustion and headache, often observed among bicyclists, to the incessant, though unconscious, strain upon the brain and nervous system due to the constant effort necessary to maintain equilibrium.

Americans who go to Italy to be educated in music have a great advantage—if they master the Italian language and study its melodies. Otherwise they have none, maintains the New York World. The whole secret of the musical nature of the Italian people lies in the musical nature of the Italian language. No one can speak it habitually without becoming unconsciously educated in the laws of melody which underlie all music.

The Beyreuth, Germany, newspapers record a new sample of meanness. An inhabitant of that city was afflicted with cataract in both eyes. He contracted with a skilled physician to have two operations performed—one on each eye—for \$250. The first operation proved very successful, but when the doctor offered to operate also on the other eye the patient refused, declaring that he could see as much as he wanted to see with the one eye, and tendered half of the amount stipulated—i. e., \$125. The physician, however, says that he fixed the price as low as he did in consideration of the quantity of payment to be received, not in consideration of the quantity of work to be done, and the unique dispute is now before the courts awaiting a Solomonie settlement.

Judge Millen of the law division of the Postoffice Department has rendered a decision concerning the delivery of mail matter by jail officials to convicts; and the same ruling will apply to inmates of charitable institutions. He holds that "state and county institutions for the confinement and punishment of parties convicted of crimes have the right to prescribe rules and regulations as to communications from outside parties to convicts. While they have no right without the consent of the convicts, to open the letters addressed to them yet they have the power to refuse to deliver or permit to be delivered to the convicts any letters addressed to them, unless they will consent that the letters be opened in the presence of some officer. Where mail is addressed to a convict, it is proper to deliver the same to the officer in charge of the prison. While this would not authorize the officer to open such letters, he would have the power, if the state and county laws or regulations of the prison so authorized, to refuse to deliver such letters to the convict during his imprisonment unless he consents that they be opened in the presence of the officer."

General John Gibbon has written an article on "Can West Point Be Made More Useful?" which commands more than usual attention among officers of the Army. He cites that in some respects the Military Academy remains the same as it was fifty years ago; that, although the course of studies has undergone radical change, the number of professors and instructors increased, the scientific apparatus improved, and the number of cadets increased with the growth of the country, yet the qualification required by law, with some few additions, remain about the same. General Gibbon makes special objection to the rule that a candidate of a certain age and height should weigh at least a certain number of pounds. He maintains that this objection may be overcome in a few months with good rations and exercise, but that if adhered to strictly a Grant, a Sheridan, even a Napoleon would be shut out. He also says that there is a hurtful prejudice against the Military Academy among the people at large, because of its supposed aristocratic character. He maintains that the academy can be made more useful by extending its education in such a way as to leave the military element in the country; and that, in case of war, the forces would be in a better state of preparation to take the field than they have ever been before.

Rain-Drops on the Roof.

Hark! I hear a patter,
Falling soft and sweet,
Like the dancing footstep
Of some fairy's feet.
'Tis the sound of raindrops,
Raindrops on the roof,
Fairy little raindrops,
Raindrops on the roof,
Oh! they sing of blessing,
From the Father's hand
As they fall so gently
On the thirsty land.
Listen to the raindrops,
Raindrops on the roof,
Happy, smiling raindrops,
Raindrops on the roof.
Falling, gently falling,
Whispering soft and low,
Of His love and goodness,
Telling us they go.
Hear the patter'ing raindrops,
Raindrops on the roof,
Softly whispering raindrops,
Raindrops on the roof.

—LOTTIE C. MOSEY.

THE AERONAUT'S STORY.

Is Jack Tunncliffe going with you to-morrow, Tom?" said my wife to me. "I wish you would take some one else."

"Why, Norah?" I asked.
"He's been stranger than ever in his manner since his wife died, I hear. In fact, I've been told by more than one person that he's quite insane at times. It's not to be wondered at if he is, poor fellow. I don't know a sadder case. He'd only been married a week. Such a horrible death, too! It's enough to turn a man's brain, and I must confess, Tom, I wish Jack was not going with you."

"Nonsense," Norah! People always exaggerate and make the worst of things, as you know. If a man's at all original or eccentric, it's at once assumed that he's non compos. Of course, Jack's low-spirited and absent-minded, and perhaps bit peculiar at times. How can he help brooding over his terrible loss? He wants some exciting occupation to take off his thoughts from his trouble. He's as fond of ballooning as I am, and a trip will do him all the good in the world."

The above conversation between my wife and myself took place on the evening before the day which I had fixed for a balloon ascent. Ballooning was my hobby. I had conceived a liking for it on my very first ascent. This liking had become a "crave," for the novel experience and strange sensation of sailing over houses and trees, and of soaring into the clouds had a peculiar fascination for me.

Recently, I had tried to combine utility with pleasure, and had made some ascents solely for scientific purposes. I had found a kindred spirit in young Tunncliffe, and we had had many delightful and successful trips together. Owing to the untimely death of my friend's wife, our aerial expeditions had been suspended for a while. As several weeks had elapsed since that sad event, I felt anxious to resume this expeditions, and as Tunncliffe had expressed his willingness to accompany me, a day had been fixed for our next trip. It was when I was talking to my wife about this self-same trip that she expressed her regret that Jack Tunncliffe was going with me.

I had not much difficulty, however, in overcoming her objections and allaying her fears. She was not averse to my hobby, and had even accompanied me in one or two of my journeys in the air. Moreover, she sympathized with me in my desire "to make some useful discovery," and was therefore unwilling to damp my ardor, or hinder the progress of my observations. She had felt the exhilarating effect of a balloon ascent, and my reference to the benefit young Tunncliffe would probably derive from the projected trip appealed to her experience as well as to her tender heart.

Accordingly, next day at the appointed time, everything being in readiness, we started on our aerostatic journey. Tunncliffe, contrary to his usual demeanor, seemed a little excited, but this caused me no apprehensions. His interest had apparently been awakened, and it was only natural that he should be animated on such an occasion. The balloon was set at liberty as soon as we had taken our seats, and the machine rose beautifully. There was a gentle breeze, which bore us slightly southward. We rose slowly at first, and so had plenty of time to gaze on the vast and extending panorama below us.

Presently we entered a huge bank or mountain of cloud of the kind called cumulus, and were surrounded by a chilling mist which induced me to put on the wraps we had brought. When we emerged from the cloud a scene of fairy-like beauty suddenly burst upon us. We were in a kind of basin surrounded by mountains of cloud of the most fantastic shapes, of

enormous size and of dazzling brightness. Now and then, as we rose, we caught sight also of wondrous ravines of curious shape and great depth. These mountains of clouds, with their silvery and golden sides, their dark shadows, their varied tints and summits of dazzling whiteness, presented to our wondering gaze a scene of surpassing beauty and grandeur.

This sublime spectacle evoked my highest admiration, while the silence and vastness of space inspired me with awe. I drank in these exquisite and varied delights with such avidity and with such absorbing interest, that I had scarcely looked at, or spoken to my companion since we had started. But an exclamation from him now diverted my attention, and glancing at him, I was surprised to see that he had risen and was much excited.

"What is it, Jack?" I asked.
"Isn't it glorious?" he replied. "I wonder if heaven is much more beautiful? How delightful it would be if we could reach it! I should see my Ada again, then."

"My dear fellow!" I interposed, hastily, somewhat alarmed—not so much by his words as by his excited manner and wild look; "you think too much of these things. You have been brooding over your loss more than is good for you. Will you—"

"At any rate," cried he, vehemently, "it's worth trying, so here goes," and seizing one of the sandbags he threw it over. The lightened balloon at once began to rise more quickly.

"What are you doing, Jack?" I shouted. "For heaven's sake, keep calm. We are a good height already. We shan't be able to breathe if we go much higher. It's getting uncomfortable as it is."

"Shan't we? We shall see about that. I'm going to try, anyhow. Besides, I don't care if I can't breathe. I want to see my Ada. That's all I care about."

I began to fear the worst. Was he going mad? Were the reports my wife had heard literally true, and not exaggerated after all? What a fool I had been not to be more cautious! Whether he was mad or not, he was in a dangerous mood, and my position was far from pleasant. To oppose him would evidently aggravate him and make matters worse. To humor him was undoubtedly the wisest course.

"Look here, Jack! I cried. "You say you want to see Ada. I can tell you of a better and surer way of going to her than this. If you will listen to me—there I involuntarily moved my hand toward the valve-cord!—if you will listen to me I—"

"None of your blarney, man? I'm not to be wheedled so. I'm to old a boy for that. Leave the cord alone, can't you? I'm not going down again to-day. I'm going to see what's up there, and don't you try to stop me," and he glared fiercely at me.

The horrible nature of my situation was now only too apparent—there could no longer be any doubt of Tunncliffe's condition. I was in a balloon with a mad man, and about four miles from the earth. I felt the cold sweat on my brow, and my brain began to reel. But with a tremendous effort I pulled myself together for my only chance of safety was in retaining my self-possession. To attempt to overpower him was out of the question—the strength of a madman is so well known. My only hope of escape was to outwit him. But how? Forced into unnatural activity as my brain was by my desperate situation, and by the necessity of prompt action, I could think of no device or ruse that would do any good; I was completely at the mercy of the madman.

We were now at such a height that asphyxia was imminent. I could hear my heart throb quite plainly. I breathed with difficulty, and a horrible sensation like that of sea sickness came over me. The cold was so intense that I shivered, notwithstanding my wraps. The mental strain was terrible. I was almost frantic. Knowing, however, that in a few minutes I should be unconscious, and that then all would be over with me, I nerved myself for one last effort.

As I rose from my seat my eye fell on the grapnel. Fortunately it was on my side of the car. A sudden idea struck me, here was a weapon to hand. It was an awful thought—it would be terrible deed. But there was now no alternative, no time for delay. My senses were going. I stretched out my hand, but the madman, who never took his eye off me, had detected my purpose. With a sudden movement he darted forward and seized the grapnel, but in his eagerness to forestall me he had precipitated himself too far over the side of the car and almost lost his balance. He made a desperate effort to recover himself,

but, seized with a sudden and irresistible impulse, I pushed him over, and with a horrible yell, which rings in my ears whenever I recall the occurrence, the madman disappeared from my sight.

Almost mad myself—I am not sure that I was not quite so just then—I climbed into the ring to reach the valve line. But my hands were so stiff and numb with the cold that I could not grasp the cord. By a kind of inspiration which seemed providential I seized the cord with my teeth, and after two or three tugs the valve opened with a loud clang, and the balloon began to descend. Thank heaven! I was saved. My hands being useless, I was obliged to throw up my arms and drop into the car, where I lay motionless and unconscious for a while.

My swoon could not have lasted more than a few seconds, for when I recovered the barometer showed that I was still in a high altitude, although the balloon was descending rapidly. I rubbed and beat my hands until the circulation was restored. Then I set about taking the necessary precautions against a too rapid descent. But I acted more like an automaton than a conscious agent, for I seemed in a kind of stupor or trance all the time.

How and where I reached the solid earth I cannot say. I have only a dim, hazy recollection of being surrounded by a crowd of people. Some were bending over me and seemed to be questioning me, but I couldn't make out what they said. I felt an awful pain in my head, and remember nothing more until I found myself in bed in a dark room and my wife bending over me. This was several days afterward, and I learned then that I had been brought home in a delirious state and had had brain fever.

When I recovered my friends congratulated me, and tried to persuade me that as my homicidal act was done in self-defence it was justifiable. I hope it was, but I can never recall it without misgiving and horror, and I have never made a balloon ascent since.—Tit-Bits.

Credit in Foreign Countries.

In Austria a credit of six months is generally allowed.

In Italy but little credit business is done, and none without good security being given.

In Cuba the time fixed for payment is from four to five months after the delivery of the goods.

In the Bermudas accounts are settled but once a year. June 30 is the day usually fixed for the payments.

In Austria it is scarcely possible to do business without allowing a long credit, which is usually one of six months.

In England a payment of the price of goods delivered is required at the end of three months, dating from the day of shipment.

In Spain four-fifths of the transactions are done on a cash basis, while in Portugal great liberality is shown and quite long credit is generally allowed.

In Turkey even objects of prime necessity are sold on credit, and in that country, as well as in Russia, the time allowed is, in most cases, twelve months.

In Mexico the large commercial houses willingly give credit from six to eight months, and in real estate trade long terms are given customers in which to settle their accounts.

In China it is not customary to give credit. Money is obtained from lenders, who exact an interest of eight to twelve per cent. Business is nearly always conducted on a cash basis.

In Canada settlements are made at the end of thirty days, with a discount of five per cent. Sometimes a credit of from three to six months is allowed, but in this case there is no discount.

"Jim" Fisk's Fortune.

A current paragraph says that at the time of his death Jim Fisk was supposed to be worth \$2,000,000, and that it is hard to believe that the only means of support Fisk's widow now has is a small income from property in Vermont which came to her from her own family. The writer of the paragraph is seemingly ignorant of the popular legend that Jay Gould quietly and remorselessly gobbled up every penny of Fisk's belongings as soon as Fisk breathed his last. The two friends had offices adjoining each other, and between them used one safe. After Fisk's death an examination demonstrated that there was actually nothing in the safe but air and dust, and Gould subsequently testified upon the witness stand that the firm of Fisk & Gould had no assets. Nobody knows where Jim Fisk's two millions went, but everybody can give a pretty close guess.—Chicago Record.

FOR FARM AND GARDEN.

PURIFY THE YARDS.

Whenever a contagious disease appears among fowls is essential to doctor the yard as well as the henhouse. This may be done cheaply by dissolving one pound of copperas in two gallons of boiling water and, when cold, adding one pound of sulphuric acid. This mixture may be applied to every portion of the soil by means of a watering pot.—New York World.

THINNING BEETS.

Many of the best seeds grow double and two plants will come where one would be better. This makes work in thinning, but it is not all loss for the small beets make excellent greens. They can be used for greens until the beets are larger than a finger, and the beet at this early stage is more tender and has a better flavor than as it grows older. There can hardly be too many of these beet thinnings, as the spring pigs will eat them greedily without cooking. They are one of the best feeds for sows that are suckling pigs, and the young pigs will soon learn to eat them as they are fed to their dam.—Boston Cultivator.

FOOD OF THE CALF.

The food of the calf and its preparation is a most important factor in the welfare of the animal. If the calf be reared in the most expensive style, that is to say, is allowed to run with its mother in the pastures, and to suck her whenever it feels inclined, it will generally make good progress, but should the cow be heated through running from the flies as the days get long and hot, the calf frequently scours, and not seldom is past recovery before it is observed to be ailing.

The same result will often occur when the animal is housed, not altogether from the same cause, but mainly because some error has been committed in preparing the food. Milk at this season, when produced from quick-grown grass, is liable to turn sour at short notice, and under such conditions is bound to do mischief to calves of tender age. Milk substitutes, whether home-made or manufactured by experts, are liable to the same defects, and the utmost cleanliness in the feeding utensils must be observed, or failure will follow. Serious derangement in digestion and fatal attacks of diarrhoea are generally traceable to these causes. They can only be prevented by constant care and watchfulness. Sweet food is as essential to the calf as to the infant.

A MODEL POULTRY HOUSE.

A poultry house costing \$8,000 was built for Mrs. Robert Garrett at her country home, Uplands, lately, and the general plans were from ideas furnished the builders by this enthusiastic lady poultry keeper. The building is all under one roof, and is over two hundred and fifty feet long. It has three turret towers, one at each end and one in the center. One of the towers will be used for choice fowls, a pigeon loft being in the second story. The feed will be kept in the other end tower. A reception room, well furnished and equipped with a library of poultry literature, occupies the first story of the center tower, the second story being the bedroom of the poultry keeper. On the right of the center tower are accommodations for brooding two thousand broilers at one time. Brooders are devices for providing warmth for artificially hatched chickens, arranged so that the chickens may run in and out at will. There are outside yards where the chickens may exercise and obtain fresh air. Compartments for brooding pens of thorough-bred poultry are on the left of the center tower. The house is constructed of wood, and the floors are all of cement. A heavy brick ornamental structure for the incubators is in the rear of the poultry house. As soon as the young chicks are well dried, after emerging from the eggs, they are taken from the incubator, and in lots of one hundred are put in the brooder apartments. A building especially arranged for fattening, killing and dressing poultry is connected with the establishment. Ducks and turkeys have a separate house in the rear of the main building.—New York Independent.

RULES FOR TREE PLANTING.

The following twenty rules are self-evident to most tree planters, who, for want of attention, break some of them, and reminders therefore often useful:

1. A valuable sort is worth more than merely a handsome tree.
2. Good, healthy, bracing roots are of more importance than a symmetrical top.

3. The roots should be long and strong enough, and the top made light enough, to obviate any staking.

4. If the roots of a tree are frozen, and then thawed out of the ground or in contact with the air, the tree will be killed.

5. If frozen roots are thawed in compactly pressed mellow earth, the tree may be made to live.

6. Manure should never be placed in contact with the roots when setting out a tree, but used for a mulch or top-dressing.

7. Trees should always be set about as deep as they stood in the nursery, or two or three inches deeper, to allow for the settling down of the earth.

8. Spread out the roots nearly equally on all sides, so as to brace the tree well.

9. Avoid particularly any small cavity next to the roots, but fill compactly against them on all sides with fine mellow earth.

10. A small, thrifty tree with copious roots when set out will be a good bearing tree sooner than a large tree with mutilated roots.

11. Watering in dry weather crusts the surface and does not reach the roots.

12. Young trees should not be set in a grass lot or among any crops of sowed grain, but the surface kept clean and mellow.

13. Shrivelled trees, before planting may be made plump, by covering for several days, compactly, with moist, mellow earth.

14. If newly set ones suffer from drought mulch the ground about them and sprinkle or shower the stems and branches.

15. The roots extend as far from the tree as its entire height; clean and mellow cultivation should, therefore, cover a circle twice as wide as its height.

16. As a general rule cultivation should be continued from six, eight, or ten years from planting, after which closely grazed or lawn-mowed grass may be permitted, with frequent top dressing.

17. The amount of manuring or top dressing must vary with the vigor of the trees; young trees should grow two or three feet yearly, and bearing ones one foot or more.

18. Keep an eye to the future shape of the tree, and timely remove small needless crossing or crooked limbs. This will obviate heavy pruning in after years.

19. Pruning when dormant tends to impart vigor; but if done when growing or in leaf it checks growth, and therefore a feeble tree should never be pruned after growth commences in the spring. But healthy strong growers may be lightly pruned at either season.

20. Most of the "bad luck" with young trees and orchards is the result of neglecting the preceding rules.—Southern Farm.

FARM AND GARDEN NOTES.

See that the stock have access to salt when running at pasture.

Alfalfa should be cut on the first appearance of bloom, as its nutrition ratio is much higher then than later on.

The very best cut feed for horses is made by mixing cut clover hay moistened with oats and corn ground together.

Permanent sod, without fertilizing, is an injury to the orchard. This has been proved in the experience of nearly every successful orchardist.

After all, why is not the flesh of the horse just as good food as the flesh of a steer or a sheep or a hog? It is certainly a more cleanly animal than the last named.

One remedy for the onion maggot is to spray the beds with a solution composed of paraffine, oil and water, one glassful of oil to six gallons of water, applied with an ordinary spray pump.

For use on the road geldings are generally preferred to either mares or horses, a fact clearly demonstrated whenever any important consignment of high-class roadsters reaches the market.

The loss of appetite by one animal may be due to some cause that can affect the whole, and by attending to the matter in time there may be a great saving in preventing ailments among the other members of the flock or herd.

If you keep a large breed of fowls like Cochins, Brahmans, etc., you should place the roosts near the ground, as in jumping to the ground their feet become sore, and corns or bunions develop on the bottom of the feet. For lighter breeds this precaution is unnecessary, as they are not so clumsy.