

One of the largest lava fields in the world is in Arizona. It extends from San Francisco Mountain to Mount Taylor, and covers 20,000 square miles.

According to the most recent census the population of the United States wholly or in part of African descent aggregated 7,470,040 souls, or 12.2 per cent of the total population of the country.

Mayor Jewett of Buffalo, N. Y., suggests the utilization of the trolley railways for carrying all street garbage out of the city from collecting stations established at convenient places along the railway routes.

A fellow of the Royal Society has issued a pamphlet on "How to Draw a Straight Line," something most people think they can do without learning. But those who can draw a line straight without ruling it can draw anything.

The New York Times publishes a list of 104 persons, men, women and children, killed by the trolley cars in Brooklyn since electricity was introduced as a motive power in the summer of 1892. Truly a bloody record comments the Trenton, N. J., American.

There is one very good explanation of the fact that great cities almost invariably grow toward the west. As regards Europe, the prevailing winds are from the west and southwest, so that these portions of the towns are brighter, cleaner and healthier than the eastern.

It is estimated that the agricultural earnings of the United States are \$3,490,000,000; from manufactures, \$3,330,000,000; from mines, \$480,000,000; from transportation, \$1,155,000,000; from commerce, \$160,000,000; from shipping \$160,000,000; from banking, \$200,000,000.

The Signal Service of the United States is founded on the text in Ecclesiastes: "All the rivers run into the sea, and yet the sea is not full." Commodore Maury writes that it was by thinking on the meaning of this assertion that he first got at the central idea of what is now the growing science of meteorology.

A fine piece of wood carving about seven feet high representing a woman crowned with a wreath and supposed to be the figure of the wife of Sir John Franklin, who was lost in the Arctic ice, is displayed in Baltimore. It is said to be the figure head of the old British bark Lady Franklin which was lost off Cape Horn a number of years ago. The New York Tribune thinks it must have drifted about the ocean for a long time as it was covered with barnacles when picked up by an Italian bark and brought to port.

It is estimated that 50,000 Chicago women do self supporting work away from home, without counting those employed in domestic service. The majority of these, of course, work in the great distributing trades—in the department stores, etc. Large numbers are employed in making paper boxes, in the clothing trades, in the furnishing goods business, in the making of bags, in the big book-binding establishments. Then there are armies of stenographers and typewriters, bookkeepers, waiters and telegraph operators. Now and then a woman escapes from the throng of wage workers and sets up a business for herself. There are women lawyers, stationers, bakers, retail estate agents, druggists, newsdealers, tobacco setters, and even butchers.

The Central American republics are getting ready for an exposition in 1896, and a bill has been introduced in the Mexican congress providing for an international exposition to be held at some future date yet to be fixed. These expositions are the natural outcome of the Cotton States and the International exposition, maintains the Atlanta Constitution, which adds: Our Spanish American friends doubtless think that if they are going to the trouble and expense of getting up fine exhibits for our big show they might as well work them for all they are worth and get as much benefit out of them as they possibly can. With this object in view they have gone to work making arrangements for expositions in their countries to be held a year or two after the one in Atlanta. It is plain that all this will help our great fair. The Spanish Americans, knowing that their exhibits will be made to do a busy second and a third time will take care to get up something worth seeing. It is hoped that the exposition craze will spread until it touches every country on this hemisphere.

A Spring Song.

Meadows—dreamy meadows, stretchin' far away;
Tinklin' o' the dewdrops on the daisies every day;
An' the clouds are lookin' whiter and the sap is in the sod,
An' the sun is beamin' brighter an' is colorin' the eod.
Singin' of the mookin' birds where wild the blossoms blow;
Fifty million roses in a perfect storm o' snow.
An' all the groves rejoicin' an' all the groovin' hills
A-lookin' glad and giddy with the rattle o' the rills.
There's a twinkle in the maples, there's a whisper in the pines,
An' the hummin' bird is bustin' for the morn' in glory vines;
There's a thrill of life prevailin' all the mountains an' the dells,
An' musics in the breezes when the cattle shake their bells.
Oh, the country's growin' brighter an' the world in glory rolls;
The sunshine's streamin' whiter through the windows of our souls;
The Lord's unlocked His storehouse with all He's got to give,
An' if life would last forever, we'd jest live, an' live, and live.
—FRANK L. STANTON in Atlanta Constitution.

Only a Woman, After All.

BY W. J. LAMPTON.

It was Helen Hoyt's third revolution in the fashionable maelstrom called "society," and as yet, though slightly giddy, she had not lost her head.

Neither had she lost her heart, albeit she was 22, and there are young women who think if they still retain possession of their hearts up to that advanced age, they are destined to hold them forever.

It may be doubted if she had a heart to lose. She had a heart, but her head went with it, and when a woman's head goes with her heart, she seldom loses it. She may let it go into the keeping of a man, but that is not always losing it, as the term is generally applied among sentimentalists. She knows where it is, and it is never beyond recall. These are the "sensible" women of the world. Never enthusiasts, but always reliable, and steady to the end, come weal or come woe, if it so be that the holders of their hearts are worthy. Heroines they may be, sacrificing everything to motives higher than mere sentiment.

That Helen Hoyt was such a woman could not be said definitely, but there was evidence to that effect in the circumstance that three men were swinging uncertainly in the balance before her. This is beyond the power of the emotional enthusiast. She may have three men in the balance at three different times, but never three at one time. She chooses first, and the man puts himself in the balance afterward.

As young as she was, she had reformed three things out for herself, aided and abetted somewhat by the counsel of the colonel, a man twice her age, a veteran of many emotional battles, and a ripe experience, which had never been rudely shocked by matrimony.

She had seen him much oftener than the three men in the balance, and she had discussed them with him, not always directly, as if she were the interested person, but oftener under the thin veil of a supposititious case, as is the custom of men and women whose inexperience needs a remedy which they are too diffident to ask for openly. Fortunately for such, there are those who will humor them.

This afternoon, Miss Hoyt sat in the quiet drawing-room, thinking. The colonel and she had talked a long time the day before on this, to her, all-important subject, and he was to come again at 5 o'clock. To add to the interest of the colonel's visit of counsel, their last talk had not been of a supposititious case, but he had made it directly personal, and she had not denied that she was the previously supposed young woman whose destiny was to be determined by question, analysis and reason.

"Ah, me," she thought, "what a study the heart is. I wonder if all women's hearts are as mine will persist in being? I know many men, but of them all, it seems there is not one that fills it, and Alice, who is the dearest of girls, says there can be but one. And the colonel—well, the colonel, tried to point out the way, but he seems to obscure it by his own presence. Of them all, three stand out distinctly, asking me to choose. My head says 'choose,' but my heart remains dumb. If it should speak, I wonder what it would say? I wonder if in all the world there is no magic touch to break its seal of silence.

There stands the professor, a man much older than myself; a grave man, noble-hearted and good, devoted to his scientific studies and rising in his profession; ill at ease and slow of

speech in the tumult of society; manifesting his brilliancy only in some philosophical or scientific discussion with men; reserved yet loving me, he says, with an ardent and absorbing love, which must be the pledge of a happy comfortable future. But is it true? Does a woman find in science and philosophy what her heart craves? Will the man who is so profoundly interested in these subjects find his wife a substitute for them? His sweet-heart may for the time, but the colonel says there is much difference between a sweetheart and a wife in most men's minds, and I wish I didn't half believe the colonel."

She laughed a short, hard laugh, and looked out of the window a moment at a man and maid as they walked slowly along, very intent upon each other.

"Sweethearts," she said, almost cynically, and became thoughtful again. "And next is the artist," her thoughts whispered to her. "The colonel says an artist is lovely to hang on the wall for ornament, but he is of uncertain value as a piece of domestic furniture. Still I like the artist very much indeed. Of course, he is youthful, dreamy and an idealist with the gaze and locks of a poet, but such things appeal to most young women as they appeal to me. Not to my everyday sense, perhaps, but to the artistic longings that move every refined soul, and I hope I am sufficiently refined to appreciate the ideal, although I don't want to neglect the real. His slightest attention is as graceful as a sonnet, so different from the clumsy, well-meant efforts of the professor, but is it sincere? Does he not study it as he would study and fashion a love ditty to me? Possibly to some other girl? Men are deceivers ever. With wealth and luxuries lavished upon him, he lingers on in retrospective glimpses of the past; his eyes, dimmed by the subdued, fading tints of rare old tapestries, shrink from the glare and bustle of the present. A career! the word has a brusque and martial sound that disturbs his reveries? Ah, if life were only a sunny morning; a canoe adrift upon a placid stream with a volume of Ibsen and no clocks to tick away the flight of time. Would it not be wiser to accept the bread, somewhat thickly cut, but well buttered, with all that science offers? The colonel says it would; and, really, I begin to think the colonel is a valuable counsellor. The fact is, I like the colonel, and when a woman likes a man she likes his advice, and likes to take it, if for no other reason than to please him. Which I think is the height of selfishness, for advice is so hard to take. The colonel smiled at me Sunday when the third man came down to see me. He smiled, too, as if he had found something. But he said nothing directly. I wonder if he thinks I like the third man best. John Franklin, that's a good, substantial name, but John isn't quite up to it. He's a Harvard kind of a man, of the sunny, fitting, class-day-in-June type; physically perfect, handsome, stunning, I might say, and much more, he stands at the university gates with empty pockets, half soberly, half gladly, and all problematically, gazing into the great unsolved future. Is it my mission to help him solve the problem? Does he love me because he is young, and love is the light of youth, shining whither it will? Would he be the same in the aftertimes? Would his promise meet the fulfillment I expect—that any woman would expect? More; that any woman has the right to demand of the man to whom she gives her heart? Is he as sure as the older man? As the sweetheart of his youth fades before him, in his wife, withered by the years that wreck the beauty of so many women, will he in his strong manhood be as tender and loving as he now is? The colonel says a woman should not marry a man so near her own age that she should grow old before he does. The colonel, I think, is arguing for himself, because he has waited so long, that he must either marry a woman twenty years younger than himself or fill a bachelor's grave. I know it, for he has told me so himself, and he says it is a dreadful thought to thus perpetuate his loneliness. Sometimes I feel sorry for the colonel, because he is such a congenial, companionable, honest kind of an old fellow, who would be so nice to have around all the time. Not much romance, of course, but what's romance after the wedding day? Heigho, I wish I were like Alice. She didn't have to make a choice. The man simply appeared and the choice made itself."

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The three men were still in the balance, and it showed no variation in favor of any one as against the other two. She stepped to the window as the colonel came up and rang the door bell. "Oh," she exclaimed, as he entered the room, "I don't know whether I've been asleep or not, but I have surely had an attack of nightmare."

"Three of a kind still in your hand, eh?" he smiled as he shook hands with her.

"Yes," she sighed. "My dear Miss Hoyt," he said to her more gently than his usual tone of lightness and jocularity, "it is not three men you should have in your head, but one in your heart."

"But which one?" she asked nervously, for she saw the colonel's hand tremble and his eyes were turned from her.

"I cannot tell you if you do not know," he replied, and this time his eyes looked straight into hers and she felt a heart-throb she had never felt before.

"Isn't it funny," remarked Miss Hoyt an hour later, "that I never thought of you?"

"It's a blessing to me that you didn't," he answered, "for if you had ever taken me into your head, I never would have gotten into your heart. A woman," concluded the colonel sentimentally, but with infinite satisfaction, "doesn't need a head anyhow; the man is the head of the family."

And Miss Hoyt only smiled and was content with this early assumption of authority, for her heart was at rest, and when a woman's heart is at rest, it is easy to smile and to be contented. —Detroit Free Press.

The Cork Industry.

Herbert W. Bowen, the United States consul at Barcelona, Spain, recently sent to the United States Government a detailed account of the trade in Catalonian cork. He says:

"One of the principal articles of export from this consular district is cork, and more of it is purchased by the United States than by any other country. The exports of cork to the United States in 1891, 1892 and 1893 amounted to \$273,395, \$189,139 and \$171,012 respectively. The next heaviest purchasers are the Argentine Republic, England, Italy, France and the Spanish colonies.

"The forests are almost all situated in the mountains of the province of Gerona, which is contiguous to France, and which is one of the four provinces, comprising the principality of Catalonia. Some of the forests are small, but others cover many acres of land. Most of them are natural, and these are the hardest and most productive. The planted forests never yield satisfactory results.

"In the natural forests there exists trees of 300 and even 400 years of age. When the tree is twenty-five to thirty years old the bark can be taken off, and thereafter every twelve or fourteen years, according to the vigor of the tree. The average yield is about forty-five pounds, and the time selected is generally the month of July.

"The manufacturing is done almost exclusively in the neighboring towns. The bark is divided into three qualities, according to its condition. The only instrument used in stripping a tree is the axe. Cars are used in transporting it to the towns, and mules and oxen are also employed for that purpose. The wages of cork men are about eighty-five cents a day, which is rather more than the average workman receives in this part of Spain. In order to protect the forests, and incidentally to increase the nation's revenue, an export duty of eighty-five cents per 100 kilograms is levied on all grades of cork."

Poetry of Rose Culture.

Dean Hole, who knows the drudgery of rose-culture, thus translates it into poetical prose, and one would hardly suspect that he meant struggles with insects and soil and all manner of total depravity: "He who would have beautiful roses in his garden must have beautiful roses in his heart. It is the inner garden. He must love them well and always. To win he must woo, as Jacob won Laban's daughter, though drought and frost consume. He must have not only the glowing admiration, the enthusiasm, and the passion, but the tenderness, the thoughtfulness, the reverence of love." —New York Post.

No Tick There.

"Why don't you wind that clock and set it going?" asked a bad customer at a country grocery store.

"That clock is a sign," said the grocer, and the customer studied it out for himself before he left the store. —Detroit Free Press.

FOR FARM AND GARDEN.

PROTECTING YOUNG TREES.

Young trees when badly broken down by cattle, can often be saved by careful pruning and painting the exposed wood with thick ochre paint well rubbed into the wound, and renewed until they are closed by new wood growing over them. Bolts and screws are necessary in repairing trees which have been broken. A large branch will need several props. It will be necessary to cut back, often quite severely, long branches. Some it will be better to remove entirely. But much loss and subsequent work may be saved by timely and studious pruning, to keep the heads of the trees well open and properly cut back. —American Farmer.

CLIPPING HORSES.

The advantages in clipping horses in winter are many. Notwithstanding that some object to removing the horse's coat in cold weather, as interfering with the laws of nature, there are sound physiological reasons for the practice. Experience is also in its favor—many practical men maintaining that to clip a horse is equivalent to giving him an extra feed of corn a day. The fetlock and hair behind the pasterns should not be removed if we desire to avoid cracked heels—otherwise chilblains. The hair should be left on, which from its non-conducting properties will keep that part of the limb warm which is so sensitive to chills. Draught horses are better left with hair on from the coronet to some little distance above the knee-joint. —New York World.

HOW TO FEED CORNSTALKS.

Reduce your fodder to a soft, pulpy mass; if you do not, it will have a sharp edge wherever the stalk is cut and hurt the mouth of the animal, and will invariably cause sore gums and impair the vigor of the animal in a short time. If the fodder is not reduced to a soft, pulpy mass, some animals will reject it because they cannot masticate it, owing to these very numerous and extremely sharp edges, and fodder thus rejected will often lead to the belief that there is nothing in the corn fodder that the animal wants. This is wrong, and nothing can be further from the truth. Prepare the food properly, and see what different results come to light. A machine can be obtained at a small expense which will cut and reduce the fodder to a soft, pulpy mass, and make it enjoyable food for the animal and a profitable one to the farmer or feeder. —Nebraska Farmer.

FISH AS A FERTILIZER.

Fish scrap is an excellent fertilizer, and the well dried and finely ground article that is found in the market is admirably adapted for plant food. There is very small profit made in handling fish, and for this reason it is not recommended by dealers as much as other goods. One of the largest producers of dry ground fish claims that "the farmer who buys fish, gets more for his money than he can in any other material." This is not true this season when cottonseed and linseed meals are so cheap, though at current quotations fish is good stuff to buy, for those who know how to use it. Last year it sold in New England and New Jersey at \$35 to \$38 per ton, containing of nitrogen 8 to 9 per cent, and of phosphoric acid 6 to 7 per cent, and had a chemist's valuation of \$36 to \$41 per ton. Potash salts or unleached wood ashes should be used with fish to make a complete manure. —New England Homestead.

MANAGEMENT OF HOTBED PLANTS.

"Sow thick and thin quick," is the gardener's motto, writes of W. L. Anderson of Indiana. Put in enough seed to insure a good stand but before the plants have more than two leaves see to it that no plant stands within one inch of another. Radishes should be three inches apart. In a month the cabbage will have eight leaves. Then transplant into open ground four inches apart. Let them stand about twenty days and then plant out, and if you take good care of them you will have all you can eat before you cut wheat. Through April you will be taking out lettuce and radishes also. As these are removed transplant tomatoes, peppers, etc., etc., four inches apart in the bed. Do not put these things into open ground before the middle of May. You will remember I told you, in making the bed, to lay the frame on, not to stake it down. Also I told you to let the soil come up very close to the glass. The bed will sink some, but it will not be long till the plants touch the glass. Then dry up the frame, and keep rais-

ing it as the plants grow. I often raise mine fifteen inches for tomatoes, for they should be in bloom by planting time. Stir the surface of the soil of the bed once or twice a week with your fingers or a trowel fork. Make the plants green and stocky by giving all the light and air possible and thinning well. Do not be afraid to put out cabbage plants in April. I had plants in open ground last year when it was twenty-two degrees below freezing. I was scared but not hurt. —American Agriculturist.

TALKS ON HIND SHOES.

H. B. Chubbuck in the American Horse Breeder, says: Mr. Hall asks, why use heel calkins on hind shoes? An easy matter to explain. Simply to ease the pastern joints and back tendons, which otherwise would be strained by the rapid growth of the toe. To illustrate: Your horse is shod today, the foot leveled and shoe adjusted to the queen's taste. Now measure from the hair to the bottom of the shoe on the toe. It will measure, for example, five inches. Now measure from hair to bottom of heel calk, which will measure say two inches. If the horse has a healthy foot you will find in the course of six weeks that the toe will measure 5½ to 5¾ inches, while the heel remains the same. One can readily see that without the heel calks the back tendons are subjected to a constant strain.

There is yet another advantage of the little heel calk. As the horse throws his foot forward on a hard or slippery surface, it prevents the foot from slipping.

Why should we use heavier shoes on the fore feet? Because the fore feet are larger, they have more and heavier pounding, they support two-thirds of the weight of the horse, and therefore it is necessary to have a heavier and stiffer shoe to support them. Take a horse driven on paved and macadamized streets. His front feet are the size of a number 3 shoe, and his hind feet one size smaller. He wears 13-ounce shoes forward and seven-ounce shoes behind. I am an advocate of light shoes, but 13 ounces is as light as he can wear and protect himself. If shod with 13-ounce shoes behind I am satisfied it would impair his action, even if the foot were strong enough to carry the weight. The average light harness horse should wear from three to six ounces more weight forward to protect his feet and balance his action. This applies in all cases with rare exceptions.

I would not advise using narrow webbed shoes forward. A shoe with the webs one-half inches wide would barely cover the thickness of the wall forward of the quarters, and would not be of sufficient width to protect a foot that had a low sole or a fat foot. The bearing would come outside of the braces of the foot, which would cause the sole to drop.

There are three essential principles to adopt in shoeing general purpose horses. First, to adjust a shoe that is adapted to a horse's gait or action; second, one that is adapted to the foot, and third, to the surface the horse has to travel on.

FARM AND GARDEN NOTES.

Winter sunshine is always good for dairy animals, if it does not reach them through a frosty air.

No cow needs a board hung over her face, or a poke around her neck, on a farm where there are good fences.

It never pays to overcrowd the pasture or stable with cows. Make the farm larger, or the dairy smaller.

Spring is the proper season for transplanting deciduous shade trees. Evergreens do better planted later in the spring.

Some cows are older and less profitable at eight years of age than others are at twelve. Difference in care is the cause of it.

The preparation of the tree for transplanting is of as much importance as the preparation of the soil for its reception.

A cow is different from a child, in that she can never be spoiled by too much petting. Speak softly, milk gently, and she becomes at once your profitable friend.

In order to secure the best growth and thrift, the orchard should have as good attention as any other crop. Before the trees are planted the land should be thoroughly prepared and in good condition.

Care should be used to mutilate the roots as little as possible in removing the tree. It is necessary that the roots be very long, but they should not be bruised and broken but smoothly cut, and protected from cold drying winds, and the direct rays of the sun until returned to the soil.