

An Improved and Finished Road in New York State, Showing the Concrete Retaining Wall, Ditching and Guard Rail.

A HOME SONG.

I turned an ancient poet's book,  
And found upon the page:  
"Stone walls do not a prison make,  
Nor iron bars a cage."  
Yes, that is true, and something more;  
You'll find, where'er you roam,  
That marble floors and gilded walls  
Can never make a home.  
But every house where Love abides  
And Friendship is a guest,  
Is surely home, and home, sweet home,  
For there the heart can rest.  
—Country Life.

A Girl's Success

They were brother and sister, the children of an inventor, whose life story had been the old one of an inventor's woes, the lack of appreciation, the failure of practical acknowledgment of his powers, and the struggle with poverty, which was ended by his early death.

The wife, brave little woman, who had eaten uncomplainingly the unbuttered bread that her husband's efforts had provided, now set forth, as many another earnest mother has done, and earned, not only bread enough to satisfy their hunger, but butter with which to make it palatable.

By the time that Ida—short for Idaho—was old enough to study United States History in the public school, Mrs. Allan could look with satisfaction around their pleasant home, and rejoice in the fact that she had much to live for.

But about this time she had vague misgivings, for both Clarence and Idaho had evidently inherited their father's inventive genius, and all at once it seemed to develop.

Clarence, who was approaching the final year of his high school course, could scarcely give sufficient time and attention to his studies to pass his examinations creditably, while Ida, who had not yet entered the academic department, found the passion contagious. Clarence laughed in his boyish fashion at his quaint, quiet little sister, and more than once hurt her feelings by his frankness.

"Girls are beginning to think they can do anything that boys can. They are a type of the 'new woman,'" he would say. "Discovery and invention are only for masculine intellects. Isn't that so, Jim?" turning to his friend.

"Well, I don't know," answered Jim, who privately admired Idaho Allan immensely.

Whether her presence biased Jim's judgment on this topic, or whether he was, from principle, champion of woman's rights, I do not dare say, but he proceeded to expatiate upon woman's powers and the recognition that the world was beginning to give them.

"Do you mean to say," said Clarence scornfully, "that you really think a girl, say Ida, for instance, is capable of inventing anything equal to this?"

And he held up for inspection his work for the time being, a wonderful construction of perforated tin, which was to be fastened on the stovepipe to save fuel.

Ida answered before Jim could find words, thereby saving him much embarrassment.

"I doubt whether I am capable of anything equal to that, but if you would lessen the angle of the upper wing, you would find that you had improved your device."

Clarence saw that the girl's suggestion was a good one, and he lapsed into silence, while Jim laughed.

For a long time afterwards, this matter weighed on Idaho Allan's mind. She had only slight faith in Clarence's ingenuity, and that she was just as capable of inventing something practical as he was, became her firm conviction, which she longed to prove.

Her mind dwelt upon the subject, and she found that she could not attend to her work, as she had heretofore done. Every day she lost grades in her studies, and the teachers expressed their wonder.

Her appetite failed and the nights

brought only restless snatches of feverish sleep. Her mother became anxious and spoke several times of consulting a physician.

This state of things could not last very long, however, and one Friday morning Idaho Allan's seat in the school room was vacant, a most unusual occurrence, and Idaho Allan herself was locked up in her own room with the key on the inside. When it was discovered that the girl had no intention of coming down to breakfast her mother's voice was heard, with quiet authority, demanding the reason.

"Oh, mother, do let me fight it out alone!"

"What is it, Ida? I must know what the trouble is."

Reluctantly, yet submissively, Ida opened the door.

"I have been thinking, mamma," she began hesitatingly, "and I really must get it out of my head. I can't go to school—don't make me go, mamma, until I have tried to work out my ideas. It won't amount to anything, I know, but I can't stand it any longer."

Mrs. Allan was a wise woman. This girl of 15 was not to be treated as a child any longer, so she said:

"You may have your own way, dear, and fight your battle in your own fashion. Lock your door, if you choose. I will not come in again until you want me, but on one thing, no, two—I insist. You must eat the meals I bring you, and go to bed at your usual hour."

Ida answered readily and the mother went away.

Soon after she returned, bringing to the door a tray containing Idaho's



"MAY I ASK WHAT YOUR TERMS ARE?"

breakfast. After the girl had eaten it she sat for a long time in intense thought. She forgot everything; she was at last an inventor!

Her books and her fancy work, the dainty belongings that girls delight in, were recklessly pushed aside. She needed her table for sterner occupation.

Shortly before tea-time on Saturday evening, the key turned in the lock, and a slender, pale-faced girl descended the stairs wearily but unflinchingly.

"Is the battle fought, little daughter?"

"Fought and won, mother; you shall see my invention to-morrow."

It was not of intricate mechanism, but underneath its simplicity lay a thought. Mrs. Allan saw that it was of practical value, but she did not say so just then.

A few days later, Mr. Gillman, himself a mechanic, and a tried and trusted friend of the family's, came in, and the invention was shown to him.

"That's a first-class idea. I'll send Harper around to see it, the next time he is in town."

By the time Mr. Harper made his appearance, Ida was ready to talk freely about her improved lamp-burner.

"I will give you one hundred dollars for the right to get it patented, and the use of the patent," said Mr. Harper.

Idaho refused the offer.

"Two hundred then," said Mr. Harper.

Mrs. Allan was a silent figure in the conference, being, as I have said before, a wise woman, but she could not keep from sending Ida a look, which entreated her to accept the offer.

"I must refuse that also," was Idaho's response.

"May I ask what your terms are?" asked Mr. Harper, looking, as he felt, a trifle nettled.

"I will take one thousand dollars for all my rights to the use of it," was Idaho's response.

"Then you will have to look elsewhere for a customer," and Mr. Harper took his departure.

Mrs. Allan plainly showed her disap-

pointment, and for several days nothing was said on the subject. Before Mr. Harper left town, he sent word by Mr. Gillman that he would give five hundred dollars, but this offer was also refused.

Three months passed away before he came to town again, and the invention slept quietly in Idaho's room. Every night she lifted the cover and took a peep at her treasure.

One day, in response to the ringing of the bell, during her mother's absence, Ida opened the door to find Mr. Harper smiling genially into her face.

"I have concluded to accept your terms. Where is the burner?"

A few moments later the deed was done, and Mr. Harper was gone, but Ida was sitting with a bit of paper in her hands, which represented one thousand dollars.

Mrs. Allan and Clarence could hardly believe it possible.

One thousand dollars! They did not know until long afterwards that the little invention netted Mr. Harper many thousands of dollars.

But with that little slip of paper Ida educated herself, leaving her mother free to help Clarence in his study of civil engineering.

One day a schoolmate inquired why, having been successful once, she did not try again.

"I shall never do any more inventing," laughed Ida. "I proved the capability of the feminine mind, and that is all I set out to do."—Chicago Daily News.

VIEWING WEDDING PRESENTS.

Remarks by the Guests Which Are Susceptible of Misrepresentation.

"Women viewing another woman's wedding presents say things which are liable to be misinterpreted," said the bachelor who declares he hates weddings but always goes when invited, to a New York Sun man.

"Now, why is it that the most common remark of the women who are inspecting the lay-out of silver and cut glass and other gifts more or less useful is: 'What a lot of presents she got!' They don't mean anything unkind, but the inference an uninitiated eavesdropper would draw is that they wonder why she got so many."

"Of course, they vary the remark. 'What a lucky girl!' says one, as if she would like to add, 'Some persons have too much luck.' And another says, 'I wonder where they all came from,' implying almost that the bride couldn't have enough friends to make so many gifts and must have sent some of them to herself just to make a showing."

"Now, these women don't mean any harm. It's just their way of expressing admiration usually. But there are others who surely evince an uncharitable, petty spirit."

"They pick up and examine every article and appraise it in loud whispers. They express voluble wonder as to whether the silver is solid and doubt the genuineness of the cut glass. Even if they do like a thing, they will decide that it won't wear well. 'Pretty silver, but how it will scratch,' says one, while another knows the china is lovely, but is to break easily."

"And so the tongues wag, while the quiet man in the corner keeps a watchful eye. He is a detective, and distrusts everyone."

The Wrong Question.

An interviewer having obtained access to the presence of a famous actor asked the great man if he would be kind enough to describe some of his early failures.

"Sir," snapped the tragedian, "I never had any! James—the door!"—Human Life.

Make One Friend a Day.

One of the busiest men in a busy city says "I try to make at least one friend a day." That seems more than most of us can manage and yet the wayside spring of a country road makes a friend of every passerby.—Woman's Home Companion.

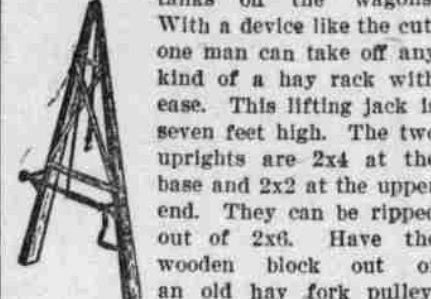
And the lack of money makes the mare go—hungry.

An humble lover often makes a very domineering husband.

FARMERS' CORNER

A Lifting Jack.

When one is alone on a farm with perhaps no help around it is almost impossible to lift hay racks or grain tanks off the wagons.



LIFTING JACK.

With a device like the cut, one man can take off any kind of a hay rack with ease. This lifting jack is seven feet high. The two uprights are 2x4 at the base and 2x2 at the upper end. They can be ripped out of 2x6. Have the wooden block out of an old hay fork pulley, bolted to the upper end of the uprights with a half inch bolt for the rope to work on. Thirty inches from the base is an offset to which is attached a spindle for the rope to wind on. The need of the offset will easily be seen in operating; the crank will always be in the clear. The crank is 14 inches long. The spindle is one inch in diameter. A piece of good one inch gas pipe makes a good one. The uprights are spread 20 or 22 inches at the base. It also needs a few light wooden braces to strengthen and stiffen it. It should be made quite strong and light, so that one man can carry it handily. On the end of the three-quarter inch rope is a five-eighths inch iron hook,

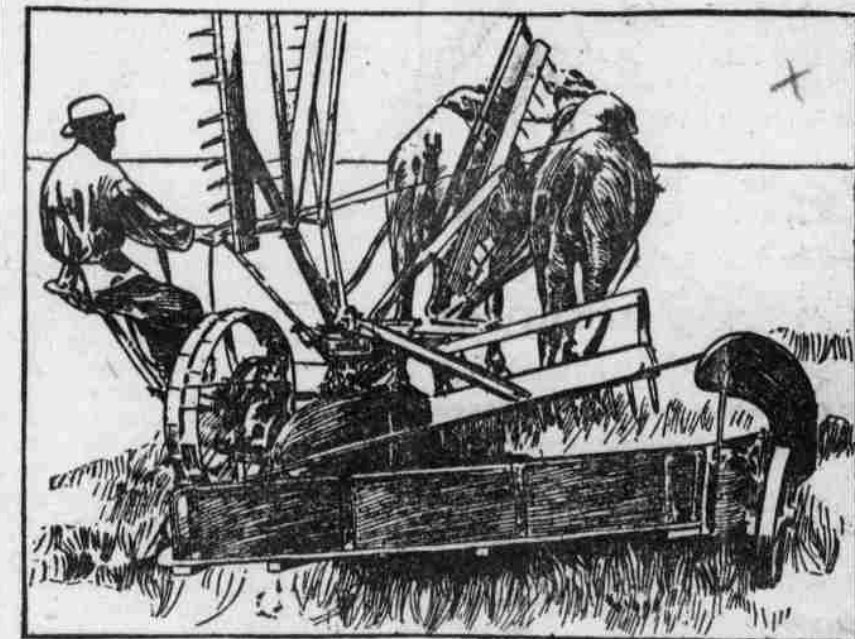
Individuality of Cows.

While there are slight individual differences in digestive efficiency among cows, extensive experiments have shown that these are insufficient to account for the widely variable returns made by similar cows from like quantities of the same kind of food. The results obtained in tests of this kind are emphatic. It has been shown that, of two cows of apparently the same merit, from superficial examination one may return three times as much as the other from a given amount of similar foods. They digested their food equally well. It is a well known fact that there are individual likes and dislikes among cows, which necessitates an intimate knowledge of each cow if best results are to follow. Occasionally a cow will make her best performance upon a ration not suited to the other members of the herd. These matters are of continual interest to the dairymen, who should safeguard himself at all times by keeping at least approximate records of food consumed and product yielded by each individual.—Kansas Farmer.

Profit From Dairy Products.

The Maryland Experiment Station has been making tests as to profits in selling dairy products, as milk, cream and butter. This test shows that cream is one of the most profitable forms of sale, when 20 per cent cream can be sold at 50 cents a gallon, and even at this low price returns 23 1/2 cents per pound for the butter in the milk, besides leaving the skim milk for use on the farm. Of course, cream can be usually sold for more than 50 cents per gallon. It appears that milk shipping is ordinarily more profitable than butter. Thus 12 cents per gallon for 3 1/2 per cent milk is equal to 23 1/2 cents per

AMERICAN REAPERS IN ASIA.

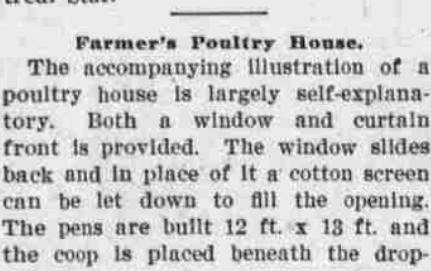


American farm machinery is rapidly finding its way into foreign countries, but our American farmers would not know how to use the machines that are sent over there. They are built to meet the demands of Asiatic farmers, who are slow to grasp up-to-date methods.

shaped so as to draw itself into the wood and not slip off. This hook needs one or two links. A hardwood peg is placed in the upright back of the crank, thus holding the load at any height. To take the hay rack off the wagon place the lifting jack in an upright position at one end as near the center as possible. Place the hook beneath some part of the rack, turn the crank, and it will surprise you how light the rack seems. When high enough so as to clear the wheels, have a 4x4 or other fairly strong timber to put under the rack, the ends resting on two well secured posts. Raise the other end in the same manner and you will have your hay rack or grain tank where the weeds will not grow over them and without any lifting to speak of.—Montreal Star.

Farmer's Poultry House.

The accompanying illustration of a poultry house is largely self-explanatory. Both a window and curtain front is provided. The window slides back and in place of it a cotton screen can be let down to fill the opening. The pens are built 12 ft. x 13 ft. and the coop is placed beneath the dropping board. Rough boards are used for sheeting together with tar paper and cheap shingles. The inside may be plastered.



POULTRY HOUSE.

Homemade Barometer. Those who love experimentation may try the following method of making a cheap barometer, as practiced in France: Take 8 grams of pulverized camphor, 4 grams of pulverized nitrate of potassium, 2 grams of pulverized nitrate of ammonia and dissolve in 60 grams of alcohol. Put the whole in a long, slender bottle, closed at the top with a piece of bladder containing a pinhole to admit the air. When rain is coming the solid particles will tend gradually to mount, little star crystals forming in the liquid, which otherwise remains clear; if high winds are approaching, the liquid will become thick as if fermenting, while a film of solid particles forms on the surface; during fair weather the liquid will remain clear and the solid particles will rest at the bottom.

pond for butter, while at 15 cents per gallon for 3.6 per cent milk the butter is sold at 32 1/2 cents per pound. In selling cream at 70 cents per gallon the price obtained is equal to 33 cents for the butter, but creameries never pay this amount, and no homemade butter brings any such price except for a very few gilt-edge makes.

Detecting Disease in Horses.

An irregular pulse in a horse is a strong symptom of grave disease. In a healthy horse the pulse beats 32 to 38 per minute, but 48 per minute may not denote disease in some horses. To take the pulse place the finger below the jaws holding the watch in the left hand, and count the beats. A rise of temperature above 100 degrees denotes that something is wrong. To take the temperature use a thermometer inserted in the rectum. By practice, a high temperature can be easily detected by inserting the hand in the mouth of the animal. Cold legs and cold ears and cold sweat are bad symptoms. Difficult and quick breathing indicate lung trouble, and "snoring" is caused by disease of the brain. A rough coat is a bad symptom, denoting indigestion. Fever in a horse is indicated by dullness, a quick pulse, high temperature, extended and inflamed nostrils and usually great desire for water.

Dairying and Farming.

Butter has a market value of \$50 a ton, and it removes less than 50 cents' worth of fertilizer from the soil. On the other hand, a ton of wheat has a market value of \$22 and removes \$7.50 of fertilizer from the soil. Anyone can see by this that dairying is worth a good deal more to a new country than the growing of wheat if the value of keeping up the fertility of the soil is fully appreciated.—Field and Farm.

White Spots on Horses.

A white spot on the forehead of a horse is called a "star." A white face from eye to eye is a "bald face." A strip between the nostrils is a "snipe." A white eye is a "glass eye." A horse has pasterns, not ankles. White around the top of the hoof is a "white coronet." White above the pasterns is a "white leg."

Kansas Corn Crop.

In 1905 Kansas raised about an average crop of corn, but the yield was more than that of all South America, which, of course, includes the much-advertised Argentina; was over 80,000,000 bushels greater than the combined crops of Canada and Mexico, and exceeded the same year's crops of Egypt, Italy, France, Bulgaria and Russia proper together.—F. D. Coburn.

THE WEEKLY HISTORIAN



1435—Treaty of Arras concluded between the King of France and the Duke of Burgundy.

1580—Henry IV. defeated the Leaguers at Arques.

1600—Hudson, the explorer, reached the present site of the city of Albany.

1655—Fort Casimir, the Swedish settlement on the Delaware, surrendered to the Dutch forces under Gov. Stuyvesant.

1675—Duchesneau appointed Intendant of New France.

1692—Two men and seven women executed at Salem for witchcraft.

1705—Jacques Francois de Brouillon, governor of Acadia, died at sea.

1750—The French surrendered Quebec to the English.

1772—First dismemberment of Poland.

1778—British made an unsuccessful attack on the Americans on Harlem Heights.

1777—American force under Gen. Wayne defeated by the British under Gen. Grey... Washington and his army crossed the Schuylkill, determined to give battle to Gen. Howe's troops.

1788—The Oneida Indians ceded all their lands to the State of New York.

1792—France declared a republic... The President issued a proclamation ordering all persons to submit to the excise law.

1800—The Concordat between Bonaparte and the Pope ratified.

1804—The rice crop of South Carolina completely destroyed by a great hurricane... Mr. Dearborn, son of the Secretary of War, left for Algiers with presents for the ruler of that country.

1814—The British ship Forth destroyed the American brig Regent... United States troops defeated the English in battle at Fort Bowyer.

1822—Moses Rogers, captain of the first steam vessel to cross the Atlantic, died at Cheraw, S. C. Born in New London, Conn., in 1780.

1829—Slavery abolished in Mexico.

1833—The boundary line between New York and New Jersey settled.

1845—Americans defeated the Mexicans at battle of Monterey.

1802—United States troops defeated the Indians at battle of Wood Lake.

1803—President Lincoln suspended the habeas corpus act.

1804—John C. Fremont withdrew as candidate for President of the United States... The Federal forces were victorious in the battle at Opequan, Va... A McClellan meeting in the Lindell hotel, St. Louis, broken up by a party of Union soldiers.

1808—Outbreak of the Spanish revolution... Lieut. Beecher and Dr. Moore killed in battle with Indians near the Republican river.

1871—Lincoln's body was removed to its final resting place at Springfield, Ill.

1881—Body of President Garfield lay in state in the capitol at Washington.

1882—Arabi Pasha, the leader of the military insurrection in Egypt, surrendered after his defeat at Tel-Kebir.

1884—A party of several hundred Canadian boatmen left Quebec to take part in the Nile expedition for the relief of Gen. Gordon... Earthquake shocks were felt in Michigan, Ohio and Indiana.

1887—The centenary of the constitution of the United States was celebrated in Philadelphia.

1893—The Earl of Aberdeen assumed office as governor general of Canada.

1897—Five men accused of burglary lynched at Vipersville, Ind.

1898—Statue of Samuel de Champlain unveiled at Quebec by Lord Aberdeen.

1900—Much destruction caused by heavy rains in Texas.

1901—The Duke and Duchess of Cornwall and York welcomed in Montreal... The funeral of President McKinley was held at Canton, Ohio.

1902—Marie Henriette, Queen of the Belgians, died, aged 68 years.

1906—Fatal race riots in Atlanta, Ga... Rock Island train plunged into the Cimarron river in Oklahoma and a number of lives were lost... Secretary of War Taft and Acting Secretary of State Bacon left Washington for Cuba.

1907—Explosion on a Japanese battleship killed thirty-four officers and men... The new treaty between France and Canada was signed at Paris.

An Explanation.

"How long has this restaurant been open?" asked the would-be diner.

"Two years," said the proprietor.

"I am sorry I did not know it," said the guest. "I should be better off if I had come here then."

"Yes!" smiled the proprietor, very much pleased. "How is that?"

"I should probably have been served by this time if I had," said the guest, and the entente cordiale vanished.—Harper's Weekly.