

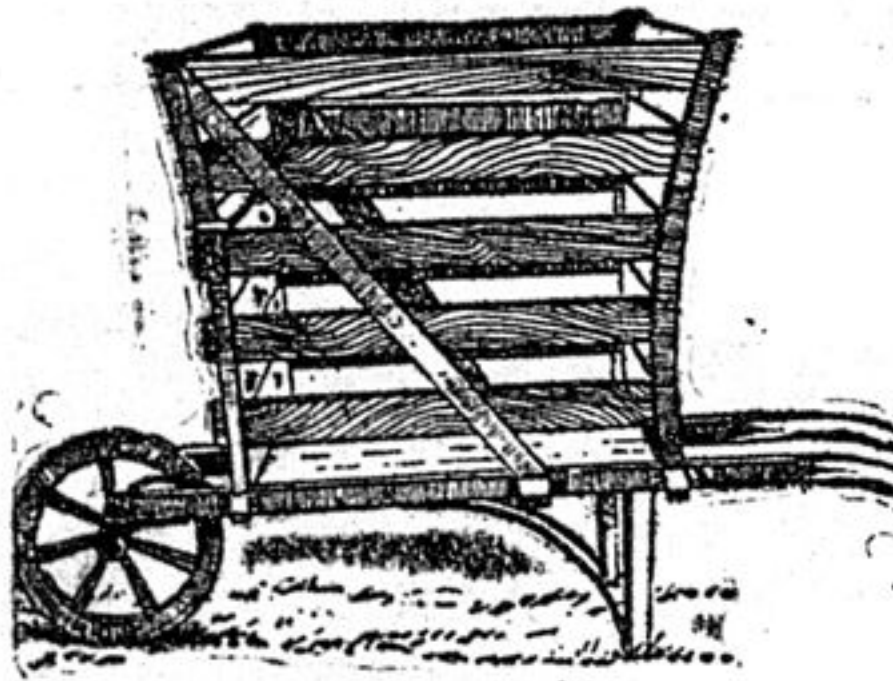
## PRACTICAL FARMING.

### Live Stock on the Farm.

The most successful farmer in these days is the specialist, without doubt, where it is possible to make a specialty of any one crop, but there are numerous farms on which it is impossible from the configuration of the land to devote it to any one crop, because of the impossibility of plowing considerable portions of it. In such a case the owner of the land must resort to live stock and become a mixed farmer, and to make this successful he must use good judgment and keep good stock, for native stock is everywhere recognized as a profitless kind to keep, if not a positive damage. With improved breeds of cattle, hogs or sheep, the mixed farmer can make a fair profit on his investment even when prices are low, and at present prices stock raising on hill lands where cropping is beset with difficulties, presents quite an attractive promise of profit. Cattle and sheep are more suitable for hilly sections than swine or horses. Swine must be grown where the corn crop is one of the staples, for under our system of feeding this grain must always be the one that is depended on for finishing them for market. Horses are not high enough in price to make it an object to the general farmer to breed them, and cattle or sheep seem to be the only hope of hill farmers. If good home markets are near, dairy farming seems the most promising form of cattle raising, as there is always a good demand for first-class dairy product, and we know of a number of farmers in the hilly counties of Ohio who are making a great success of farm dairying. Sheep will do well on the most barren hills, and as lands in such sections are always cheap, an area large enough to give the flocks plenty of room is nearly always available. In these portions of the country if the manure is carefully looked after, the tillage portions can be kept at a high degree of fertility and the direct benefit derived from the flocks of sheep kept will be by no means the only ones that may be counted on for the productiveness of the fields that are farmed will be largely increased.

### Enlarging a Wheelbarrow's Usefulness.

It is often desirable to wheel away from a lawn or garden, light rubbish, straw, hay, or vines, for which purpose the ordinary wheelbarrow does not give sufficient accommodation. So often it is desired to wheel away light but bulky loads of this sort, that such an arrangement as is shown in the illustration will be found very serviceable. It is simply a light rack frame that



WHEELBARROW WITH RACK FRAME.

can be attached to the barrow in the same way that the ordinary sides are attached, the addition of a couple of sockets near the handles being the only necessary addition to the barrow in order to accommodate the rack. The construction is so plainly shown in the sketch that added explanation is not needed.

### More Potash Needed.

The need of more potash in fertilizing is becoming more and more apparent every year, and the experiment stations are sending out some information of value in this direction. When the country was new and first brought into cultivation there was a good supply of potash in the soil in an available shape, and its need was not so deeply felt. Wood ashes are valuable because of the large percentage of potash in them, and should all be saved. Professor Brooks furnishes the following, which will well repay a careful perusal by farmers in all parts of our country:

1. Fodder crops, pasture grasses, corn stover and hay all remove large amounts of potash from the soil, and these crops occupy a large proportion of our improved lands.
2. The urine of our domestic animals contains about four-fifths of the total potash of their excrements.
3. When urine is allowed to waste, the manure is poor in potash.
4. When manures are exposed to rains much of the potash, being soluble, is washed away.
5. Nearly all the special fertilizers are especially rich in phosphoric acid, and do not contain enough potash.
6. Superphosphates were the first fertilizers to come into general use among our farmers.
7. When the farmer buys a fertilizer, he still, nine times out of ten, calls for a phosphate.
8. As a result of the above conditions our soils seem to be quite generally in need of more liberal applications of potash.
9. In the case of corn the need of potash appears to be particularly prominent.
10. For a good crop of corn the fertilizer used should supply 100 to 125 pounds of actual potash per acre; 200 to 250 pounds of muriate of potash or one ton (50 bushels) of good wood ashes will do this.
11. With ordinary farm or stable manure it will generally pay to use some potash for corn; 125 to 150 pounds of muriate of potash has given profitable results.
12. The liberal use of potash means more clover in our fields, more nitrogen taken from the air, more milk in the pail, a richer

manure heap, and store-houses and barns full to overflowing. It means also a soil which, when turned under, will help every other crop.

13. For the potato crop the sulphate appears to be much superior to the muriate of potash, promoting both yield and quality in much higher degree; 300 to 400 pounds of high grade sulphate of potash furnishes enough of this element.

14. For oats, rye and grass, nitrate of soda applied just as the growth begins in spring has proved very beneficial; 300 to 400 pounds per acre should be applied.

### BACK FROM THE CENTURIES.

**Ghostly Proof of Horrible Disasters, Some of Which Eclipse Those of Our Times.**

While the horrors of the mining disaster in Wales are still upon us a ghastly story of a similar event comes from China: It was known from the records that in 1494 a terrible accident had happened in the Anhuri district. A few days ago a mining party reopened the old shaft. There they found the bodies of 170 men just as they were struck down 400 years ago. The absence of light and air had kept the bodies in fresh preservation. China is a long way off, and the story will need corroboration, but more incidents of the same kind have happened than is generally supposed.

In the spring of 1796 the ruined cemetery of the Earls of Kylesyth was opened by some vandals, and the bodies of Lady Kylesyth and her child were found as perfect as on the day they were entombed in 1717. "On June 12," says the minister of the parish, "I saw the body of her ladyship. It was quite entire, every feature and every limb was full as in life, the shroud clear and fresh, and the color of the ribbons bright. The child lay at her knee, the features composed as if he had been asleep, and the smile of innocence sat on his lips. The body seemed to have been preserved in some liquid of the appearance of brandy; though perfectly transparent it had lost all pungent qualities, its taste being quite vapid."

Curiously enough, the bodies when exposed to the air did not crumble into dust. For several weeks they underwent no visible change, though sullied by the drops of grease from the candles held over them, nor for months after, though pressed with the finger, did they yield to the touch, but seemed to retain the elasticity of life.

At the monastery of the Capuchins, in Palermo, there is a vault in which are niches in which the bodies are placed upright, and clothed in a coarse dress, with the head and arms and feet bare.

They are prepared for the situation by broiling them upon a gridiron over a slow fire till all the fat and moisture are consumed. The skin, which looks like pale-colored leather, remains entire, and the character of the features is preserved. Among the most remarkable historical instances of the preservation of the dead is that of Edward I., whose tomb was opened in 1870, and his body, after a lapse of 463 years, was undecayed.

The body of Canute, the Dane, who ruled in England in 1017, was found "very fresh" in 1766 by the workmen repairing Winchester cathedral. No device of art, however, appears equal to the simple process of burial in peat moss. In 1569 three Roman soldiers, in the dress of their country, were dug out of a moss of great extent, called Kazey Moss. When found after a lapse of 1,500 years, "they were quite fresh and plump." A most romantic incident in this connection happened some years ago in Sweden.

In digging in a peat moss, the bodies of several persons who had been missing for 50 years were discovered. The dead had suffered no change, but there were few living persons who could recognize them. Among them was a woman of 70 who had been engaged to be married to one of the long lost individuals. The contrast between the living and the dead, as the old woman bent over her young lover, is described as having been inexpressibly touching.

### A FRIGHTFUL SPECTACLE.

**A Commercial Traveller Cuts His Throat From Ear to Ear.**

A despatch from Montreal says:—A well-known commercial traveller named William Snell, aged 47 and living at 71 Cadieux street, made a desperate and quite likely successful attempt to commit suicide at his home about 10 o'clock Friday morning. Mr. Snell was at the rooms of the Dominion Commercial Travellers' Association at 5 o'clock, and many of his fellow-members noticed that he appeared to be very absent minded and complained to several gentlemen of his inability to sleep. The family retired last night at the usual hour, and as a lady friend of the household was visiting Mrs. Snell, her husband occupied an adjoining room alone. Before going to bed the unfortunate man spoke to those present of the terrible insomnia, but nothing was seen until after midnight, when Mrs. Snell, hearing a noise, went into her husband's room and a frightful spectacle greeted her. Mr. Snell had cut his throat from ear to ear with a razor and was lying on the bed gasping for breath and apparently dying. The alarm was given and Dr. Roddick was called. Upon examining the frightful wound it was found that the artery had not been severed, but little hope is held out that the victim of his own hand will survive. Mr. Snell is without means, but should he die his widow will receive \$1,000 from the benefit fund in connection with the Commercial Travellers' Association, to which her husband belonged. Snell was no doubt insane when committing the deed, as he appeared to regain reason while the doctors were around him and said to his wife: "What have I done; what are these men doing here?"

### Served Him Right.

Mr. Jinks—"I see the editor of the *Trumpet* is having trouble with his wife. She wants a divorce."  
Mrs. Jinks—"I don't wonder. He was always printing articles about housework being healthful."

### EXTRAORDINARY FREEZING.

**A Useful Invention Presented to the Fishermen of This Country.**

A few days ago Mr. Adolph Nielsen, the Superintendent of Fisheries at St. Johns, Newfoundland, exhibited in presence of a large number of fishing Captains, "planters," fishermen, and the general public, a new apparatus for freezing fish or any other animal substance, which is so simple, inexpensive, and easily worked that it promises to be of immense benefit to our fishermen and to all interested in the fisheries, especially in connection with the preservation of bait, writes a correspondent. It frequently happens that our fishermen lose a third or a fourth of the whole fishing season from the want of bait. Day after day the cry is, "Plenty of fish, but no bait!" Our bait fishes are herrings, capelin, and squids. These strike in on the shores and in the bays in enormous shoals and with wonderful regularity. Each has its season, and then disappears into the unknown depths of the ocean, giving place to its successor. But it very frequently happens during the season of any one of these species of bait fishes, the shoals suddenly leave portions of the coast and do not reappear for days or weeks. In such a case the fishermen who are plying hook and line or bait-using devices are left idle. The cod may be around in myriads, but without bait the poor toilers of the sea are left powerless. This want of bait often entails most serious losses and shortens the season's catch. It is evident that if the fishermen had any means of preserving bait in a fresh condition they could take it in any quantity when it is plentiful and store it up for the time of famine, so that they need never be without bait.

Mr. Nielsen's apparatus is designed to meet this difficulty, though it may also be used for many other purposes. Its construction is so simple that any fisherman, after seeing it, can easily make a freezer for himself, and the cost is almost nil. All that is wanted is a stout barrel, some coarse salt and ice chopped up into small pieces. This is all that is needed for the new freezer, which is at once cheap and expeditious in its operation.

Of course, ice and salt mixed have long been in use to produce an intense degree of cold, and thus freeze various articles. The apparatus for making ice cream is a familiar illustration of this. Hitherto, however, this method has aimed at freezing articles indirectly. Either the ice and salt have been enclosed in metal receivers, in isolated rooms, and the cold produced by their intermixture penetrates into the atmosphere of the refrigerating rooms, and so lowers the temperature as to freeze any articles such as fish or meat placed within them to undergo the process, or the articles to be frozen have been inclosed in metal vessels of various construction, and then buried in the salt and ice. Both these methods are slow in operation. The latest and most improved American salt and ice freezer requires from fourteen to seventeen hours to freeze a herring hard. In neither system is there any motion or rotation of the freezing mass.

By Mr. Nielsen's method half a barrel of herrings are frozen as hard as a piece of wood in from ten to fifteen minutes. A description of the apparatus will enable any one to make it for himself.

A common barrel, such as a pork barrel, is taken, and inside it are placed four wooden flanges or laths, and fastened to the sides, the sharp edge outward. They are placed diagonally, so as to make two irregular triangles. The object of adjusting them in this oblique position is to mix and rotate the articles to be frozen with the ice and salt when the barrel is put in motion. The barrel is then loaded full with alternate layers of ice and salt, the proportion being three parts of ice (or snow, which is equally good) and one part of salt. Whether the ice or salt is put in first makes no difference. In the present experiment three shovelfuls of ice were first put in and then one of salt, and so on alternately till the barrel was half filled. Then the barrel was filled up with fresh herrings and headed. The head of the barrel is not pointed around the edges in the ordinary way and the "chimes" are cut down perpendicular to the cross, in order to make it easier to put on the square-edge head in and take it out. The barrel, thus boarded and headed up, was placed on its side on the floor and rolled one and a half turns on its bilge forward, then back one and a half turns. This rolling was continued for fifteen minutes at a moderately quick rate of speed, which must be learned by experience. If too slow longer time for freezing is required. At the end of fifteen minutes the head of the barrel was removed. The whole contents of the barrel were intermingled, and the whole herring found to be frozen almost as hard as a rock. They were then placed in sawdust and examined at the end of a fortnight and found to be as hard as ever, without the least sign of softening. Four more barrels were treated in the same way. So intense was the cold that one of the men got the tips of his fingers frostbitten in handling the herrings. Where sawdust cannot be obtained dry mould or moss will do almost so well. The ice and salt can be used over again many times, as long as it will last.

Those who witnessed the experiment expressed warmly their delight and astonishment. There was but one opinion as to the great benefit this barrel freezer will confer on our fishermen. Capt. Blandford, one of the most intelligent and experienced of our fishermen, declared that if he had had such a freezer with him last year on Labrador it would have been worth \$1,000. Invariably he lost each Monday procuring bait, as he had no way of keeping it fresh from the Saturday, and sometimes one or two days more from want of bait. Capt. Whiteley, another Labrador man, was equally emphatic in his praise. The fishermen were not less enthusiastic. Mr. Nielsen is to exhibit the invention in Harbor Grace and other outports. Large numbers of these freezers will speedily be in use. Mr. Nielsen stated that he is not the inventor, but a friend

and countryman of his in Norway, named Mr. Wallems, who has sent him a model and permitted him to use it in this country. The Fisheries Department will no doubt send an honorarium to the inventor as an acknowledgment of his kindness.

It is easy to see that the benefits of such an ingenious but simple apparatus will not be confined to freezing bait. Fish of all kinds—cod, salmon, trout, lobster—can be frozen and kept fresh. Game, poultry, beef, mutton, venison can be treated by this method. Household uses will at once see its manifold uses. Once it is made known the fishermen of all countries will be sure to use it. In Newfoundland it will be worth many thousands of dollars annually to the fishermen. The poorest fisherman can have his own freezer, or a number of them can combine, and, with a single freezer, lay up an abundant supply of bait. A small ice house in each village would give ample supplies of ice for working the freezer. The result of the experiment goes to show that the herrings frozen in this way will keep, even in small quantities, for a month. In large quantities, they could be kept for two, perhaps three months.

### WOMEN DISGUISED AS MEN.

**Some Romantic Stories Recalled by a British War Office Eumer.**

The recent attempt made by the naval officials to hush up what would have furnished material for a scandal of unusual dimensions has apparently been successful. This was that in more than one vessel of war females, dressed in male attire, had been acting as officers' private servants. Rumor even went so far as to say that some of these girls were highly connected. The affair revives the recollection of many cases of women in breeches, says London Truth.

It is said that 150 women disguised as men were discovered in the United States army of the Potomac in 1866.

The list of strange impostures would of itself fill pages, the narrative of their conception and fulfillment would occupy several volumes. Some of them have been quite purposeless; some have been daring and well affected, but the shrewdest and most daring of all have been criminal in design and too often successful.

The late Col. Burnaby told of the discovery of a woman who served as a soldier in the ranks in the army of Don Carlos in 1874. She wore the uniform and lived and fought just as the other soldiers, but a priest in whose parish she had lived identified her. Don Carlos removed her to the nurses' quarters, but she begged to be sent back to the ranks. He laughed. "Not to the regiment of men, but when I form a battalion of women you shall be colonel."

In Australia not so many years ago there was a woman who traveled under the alias of Edward de Lacy Evans. For years she was a miner at Bendigo. She is stated to have been married as a man three times. Her true sex was discovered upon her reception into Kew lunatic asylum. She eventually recovered her reason and returned to the outer world.

The career of Mary Ann Talbot contains a still further flavor of romance. She was the reputed daughter of the earl of Talbot, and at 14 years she fell into the hands of a certain Cap. Bowen of the Royal navy. The captain, being ordered to San Domingo, took her with him, disguised as a page boy. When Capt. Bowen was killed in action Mary Ann changed her flag and entered the French navy. She then entered the American merchant marine. She quickly—of course, still in male disguise—became a favorite with the captain of the vessel, and he took her home with him. His niece fell in love with the pretty sailor boy, as she considered him, and proposed marriage herself. The proposal Mary Ann deemed it prudent to accept, and it was arranged that the marriage should be celebrated on the sailor's return from his next voyage. It is hardly necessary to say that this gay deceiver had no intention whatever of going back. Landing in England, Mary Ann was arrested as a deserter from the British navy and, to escape further service, she confessed her sex. The story of her adventures immediately spread abroad and created a considerable sensation at the time. The then Duke of York procured for her a pension, and she received numerous and handsome presents from him and from others.

It is strikingly noticeable that many of these amazons were fatally attractive to their own sex. As we have seen, Mary Ann Talbot unwittingly captivated the heart of the American captain's niece, while "Edward de Lacy Evans," who married three wives, must also have been a very pretty fellow.

### Burning Mountain.

At Wingen, in New South Wales, 204 miles from Sydney, is a burning mountain, one of the most remarkable sights to be seen in Australia. It is 1,820 feet in height and is supposed to be a large coal seam which has in some unaccountable way become ignited, and has been burning for many years, certainly long before the advent of the white man in this portion of the colony. The course of the fire can be traced a considerable distance by the numerous depression of chasms occasioned by the falling in of the ground from beneath which the coal has been consumed. Smoke is continually issuing from the sides of the mountain, and in the vicinity of these openings the surface is hot, and has a dry, parched appearance, while sticks thrust into these openings are readily ignited.

### "M. A."

According to a New Zealand paper, the Rev. Hugh Price Hughes, M. A., never fails to have these initials written after his name; but sometimes, in places where Masters of Arts are rare, the cabalistic letters fail to make their proper impression. A deacon in an out-of-the-way township read to his congregation the written notice of Mr. Hughes' impending visit thus: "The pulpit of this church will be occupied on Sunday next by the Rev. Hugh Price Hughes' Ma." He added the gallant reflection, "And we have no doubt the old lady will give us a very telling discourse."

## ODD THINGS IN NATURE.

**ALMOST INCREDIBLE STORIES NATURALISTS TELL US.**

**Some Surprising Things in Plant and Insect Life—Fishes That are Centuries Old—The Usefulness of the Bait Worm—Interesting Experiments by Noted Scientists of the Age.**

There are many surprising things in plant and insect life, especially when comparisons are used to call attention to them. For instance Delisle tells us of a fly that ran nearly three inches and made 40 steps in half a second. This is equal to a man's running 20 miles a minute. The flea leaps 200 times its own length. At this rate a man six feet tall would bound at one effort a distance of 1,200 feet. The mite in the cheese is only one-fourth of an inch in length, yet it can take the tip of its tail in its mouth, and then letting go with a sudden jerk, jump out of a bowl six inches in depth. To equal this a man should be able to jump out of a vertical shaft in a mine 144 feet in depth.

A beetle placed under a glass tumbler will push the tumbler around on a table. To match this, a man relatively should be able to walk off with a small lighthouse. The brain of a canary is larger than the brain of an elephant. Oh, that can't be true! you explain. Remember, we mean proportionately.

President Clarkson, of Amherst College, some years ago made a series of experiments upon the growing power of a squash. When it was eighteen days old, and measured 27 inches in circumference, he enclosed it in a sort of iron and wooden harness, with a long lever attached, the latter was weighted according to the growing power of the squash. Beginning with 60 pounds on the twentieth day of its existence, on the nineteenth day it lifted 5,000 pounds.

A peculiar plant is found in the States of Oregon and Texas. It is known as the compass-plant, the polar plant, and the pilot-weed, owing to the polarity of its leaves. The radical leaves present their edges north and south, while their faces are turned east and west. This peculiarity has long been known to hunters, who, on dark nights, easily get their bearings by feeling the direction of the leaves. Another guide to hunters is the moss on the trees. It grows more thickly on the north side of the tree than on any other side.

The seed of the globe turnip is not larger perhaps than the twentieth part of an inch in diameter, and yet in the course of a few months this seed will be enlarged by the soil and the air into twenty-seven million times its original bulk, and this in addition to a considerable bunch of leaves. Dr. Desguillers made some experiments, proving that, in an average condition, a turnip seed may increase its own weight 15 times in a minute. By an actual experiment, made on the peat ground, turnips have been found to increase 15,000 times the weight of their seeds a day.

There is a shell-fish called the coat-of-mail, which has its eyes not on its body where we would naturally look for them, but on its shell. They glisten like crystals in their calcareous settings. As well might we expect to see eyes on the shell of a tortoise, or on our finger nails. The discovery so new in science, has led to a closer inspection. In one specimen 360 eyes were counted, 24 rows, with an average of 15 in each row. Another shell, in which the eyes were very small, had 8,500 eyes on it.

Fish live to a wonderful age. Prof. Baird tells us of pike in Russia whose ages date back to the fifteenth century. In the royal aquarium at St. Petersburg there are fish that have been there for 140 years. They live on without seeming to arrive at maturity. There are also some very queer crabs in the world. The soldier crab of Bermuda carries heavy shells up the hills. A shore crab in the Cape Verde islands "may be seen running along like a piece of paper blown by a strong wind." In Ascension Islands there are crabs that steal young rabbits from their nests, while the famous robber crab of the Philippines cracks coconuts and eats them.

Perhaps not one boy in twenty while digging worms for bait stops to wonder why worms are made, or how many there are in the ground. The attention of Darwin, the eminent naturalist, was attracted to the subject when a boy, and one of the last articles he wrote was a treatise on the vast importance of the earthworms to the human race. The scientific world was astonished at what he had to say on the subject. The fertility of our soil is due to the labors of these insignificant creatures. By penetrating the earth in every direction, and depositing their own remains therein, the fertility of the soil is not only kept up, but is largely improved. Their number is surprisingly large. In old pastures in England the worms are estimated at 22,000 to the acre, and as many as 54,000 in richly cultivated gardens. Mr. Urquhart estimated the number of worms in the rich pasture lands near Auckland, New Zealand, at from 400,000 to 800,000 to the acre. Were it not for the earthworms soils would become barren, and half of the world would die of starvation.

### Broad Hint.

Sir Andrew Agnew, of Lucknow, a well-known Scotch baronet, was long pestered by an impudent sort of person, who insisted on being constantly "underfoot." Finally, however, he dropped off, and Sir Andrew was asked how he got rid of him. "Oh," said he, "I gave him a broad hint."  
"A broad hint?" repeated the inquirer. "I thought he was one of those who never could be induced to take one."  
"By ma saul," said Sir Andrew, "he was obliged to tak' it! For as the chiel wadna gang out of the door, I just threw him out of the window!"

### Uses of Thermometers.

Little Dot—"Pshaw! I'm mos' roasted. Can you read the thermometer?"  
Little Dick—"Yep."  
Little Dot—"Well, go look at it, an' see if I'm as hot as I feel."