AGRICULTURAL.

Horse Sense.

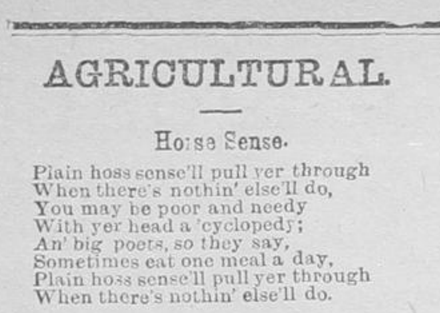
Plain hoss sense'll pull yer through
When there's nothin' else'll do,
You may be poor and needy
With yer head a 'cyclopedy;
An' big poets, so they say,
Sometimes eat one meal a day,
Plain hoss sense'll pull yer through
When there's nothin' else'll do.

There are big men, I expect,
Wallerin' in intellect,
Spoutin' swimmin' in the sea
Of their own philosophy,
Who might grab the shore an' stand
On the dry and solid land—
Plain hoss sense might pull 'em through
When philosophy wouldn't do.

With hoss sense yer'll never fail
If yer haven't been to Yale,
Don't be scared, but use yer head,
Not some other man's instead,
Don't lay up there on the shelf,
Walk about an' trust yerself,
Plain hoss sense'll pull yer through
When there's nothin' else'll do.

One Man Sawing Device.

Our illustration, re-engraved from the Practical Farmer, is of a device to enable *one man* to successfully and easily use a cross-cut saw. A, is the bench made of a log flattened on top. B B, two boards four inches wide placed on the top of the bench which is far enough apart for the saw handle to work between. C, is the saw. D D, pins in the bench to hold the boards which should be nailed down. E, is the block of wood between the boards to hold



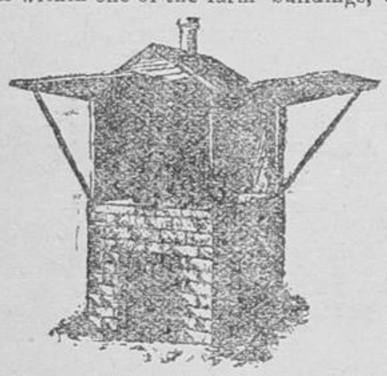
ONE MAN SAWING DEVICE.

them in their place. F, is the spring-pole. G, is the rope attached to spring-pole and saw. H H. is the log way, consisting of two logs placed about two feet apart and showing the ends of two rollers on them to keep the front one in its place at each end.

I, is the shape of front roller on the one side where it rests on the log way. Bore two holes in either end in opposite directions to insert a short lever with which to turn the roller. J is the log to be sawed. Attach the saw and see how easy one man can use it and thus save expense.

Locating a Farm Kettle.

One of the necessities upon a farm is a set kettle for boiling food for hogs, hens, and other stock. It is often impossible to locate this within one of the farm buildings, and



FOUNDATION AND SHED FOR A FARM KETTLE.

so the necessity arises of building a brick foundation for the kettle out of doors. Such a set kettle should be protected from the weather, for, if it is not, the kettle is soon rusted, and the bricks become loosened by the entrance of water from the top. A good protection is shown in the illustration. *The corner uprights are secured to the* brickwork by iron straps, one side and the front of the wooden structure being hinged at the top, allowing free access to the kettle. This useful contrivance will be more convenient if the top of the structure in which the kettle is set be of one complete slab of stone, slate or soapstone, but this is not at all necessary.

Method of Preserving Meat.

G.H.T. writes Orange Judd Farmer: In regions where the temperature seldom goes but a few degrees below the freezing point there is considerable risk in preserving the year's supply of meat. To such an extent is this true that for the want of a little reliable information, many farmers in the Southern States do not attempt to keep meat, have given up hog raising and relegated this industry to the farmers of the West. Spoiled meat in the South used to mean high prices for Western pork, but now it results in the increased consumption of strictly home products, viz.: butter, milk, syrup, etc., which now are cheaper than formerly. The "essentials" of meat preserving in warm latitudes may be included under six heads.—1. Freeing from animal heat as quickly as possible, and never salt until this is thoroughly done. This is accomplished as follows: Kill the hogs and clean as quickly as possible. Remove the entrails at once, wash out well with cold water, and hang in the coolest place possible where they can remain over night. Where the temperature stays up in the "sixties," I have found it necessary to cut up hogs on the afternoon of the same day on which they were killed, and to lay the joints on the roof of some out-house or raised platform put up for this purpose. Here it will be exposed to the air and sky, and radiation can go on freely and rapidly. Getting rid of the animal heat is an indispensable requirement in curing meat. If it is not got rid of before salting down, the meat will certainly spoil.—2. Before thus exposing the carcass (whenever the weather is, or is likely to to be unfavorable), unjoint both hams and shoulders at each joint. This lets out the "synovial" or joint water which is another important item in preserving meat in warm climates and unfavorable seasons, for it is at those joints that meat invariably begins to spoil.—3. Rub into each piece the following mixture: Salt 7 lbs, and saltpeter, 1 oz. This will penetrate the meat rapidly and will "draw out" the blood, which is a great advantage. —4. Have new or thoroughly cleaned boxes or barrels in which to pack away the meat. —5. In dry salting put a layer of salt in the bottom of the box or barrel, pack the meat, skin side down, in salt, not permitting any two pieces to touch each other, neither must the meat be allowed to come in contact with the boxes or barrels in which it is packed, in short, do not allow it to touch anything but salt, and after it is all packed away, cover with salt sufficient to exclude the air. Provide a way for the brine to escape, and be sure to store in the coolest place to be found. The time to remain in salt depends on size of meat and temperature—longer for large meat and cold weather, and vice versa. Four to six weeks is long enough. Then take up, hang and dry, and smoke well with green hickory or corn cobs, or both. Take down before the skipper fly makes its appearance (say March) and pack away in good sweet hay, or wrap each piece in paper separately and pack the whole in ashes. If the season is favorable for meat curing it is not necessary to unjoint hams or shoulders, but in order to be on the safe side, slit them lengthwise down to the bone, filling the slits with the mixture of salt and saltpeter, Method of pickling pork.—This method will not fail even for meat killed in Midsummer if the nights are cool enough to get rid of the animal heat previous to putting in pickle. Prepare the meat as directed above for dry salting have new or thoroughly cleansed barrels. Make a brine as follows: Salt, 16 quarts; saltpeter, 1 lb; brown sugar, 2 lbs; common soda, or better, bicarbonate of potash, 2 oz. Dissolve in water and boil as long as any scum rises. When perfectly cool pour over the meat taking care that it is kept under the liquid. Make the brine strong enough to bare up an egg. The 6th "essential" consists in properly preparing and applying the brine. From practical experience and repeated tests at all times of the year, bad seasons as well as good, I can safely say that if the above directions are strictly followed the method is safe and certain. In no other business of the farm is strict attention to details of greater importance than in preserving meat.

Salting Pork.

Have the pork barrel perfectly tight—if it leaks the brine the pork will be ruined. Begin by putting a good layer of salt on the bottom, then cut the "side meat" into pieces of a convenient size and make a tight, closely-fitting layer of meat; on this put another layer of salt, packing all the crevices full; then another layer of meat, and so on, alternating with salt and meat until all is packed or the barrel is about full. Do not put on a particle of water, or sugar or syrup, or anything except salt. The juices of the meat will dissolve the salt and make a pure, sweet brine that should completely cover the meat. Put a board with a stone on the top to hold the mass firmly down and the work is practically done. Remember, on no account should a particle of joint or a bony piece go into this barrel—the joint fluid will within even a day or two ruin the brine. If all this has been properly done—the meat perfectly clean and free from all bloody pieces, as it should have been—nothing more remains to be done. But usually it is safest after about six weeks to pour the brine off, heat it until it comes to the boil, then carefully skim off all impurities, let it cool and then pour it back again, and if at any time there should not be enough of brine to completely cover the meat some must be prepared and added. It should be borne in mind that the great essentials to success are strong, pure brine, and plenty of it, keeping the meat covered with it, and the exclusion of all joints, bones and bloody pieces of meat.

For making bacon the curing process is the same as described, the pieces to be taken out as soon as sufficiently salted, and then smoked the same as the hams.

A NARROW ESCAPE.

A Buffalo Girl Very Nearly Buried Alive —She Was in a Trance.

A Buffalo despatch says:—One of the most fashionable families in the city has narrowly escaped having a terrible tragedy enacted in their house, and by their innocent instigation. Before daylight Coroner Ransom was aroused by a telephone call from this house. The order was imperative that he come at once and remove a corpse before the neighbors were stirring. The coroner hastily summoned Rodney, the official undertaker, and went directly to the place. He was ushered in by the lady of the house who was on the verge of hysteria and nervously told him that one of the servants

HAD DIED SUDDENLY

during the night. The coroner was shown upstairs. There lay the pale and rigid figure of a comely, well-formed young woman. The body lay on its back, the hands peacefully folded on the bosom. The coroner pronounced it a natural death, from superficial examination, and ordered the remains removed to the morgue to await autopsy. The undertaker's first assistant, with easy familiarly born of frequent handling of the dead, grabbed an arm to draw the body toward him, when he felt an unmistakable jerk. He called for Dr. Ransom. The coroner made a closer examination, but could discern no pulse. "She's dead, all right enough," said he. "I tell you she's alive, said the assistant, putting his ear to her heart. The coroner stooped and applied his ear, and could barely hear the pulsations. A mirror was placed over the girl's lips, and it showed a trace of vapour. "This isn't our case," said the coroner; "you take the coffin out and I'll

CALL A DOCTOR

for the living, I'm only the doctor for the dead." Upon the arrival of another physician the girl was resuscitated. Here was a case of suspended animation or trance, he determined. To-day she is as well as ever. Very fortunate, indeed, it is for her that the undertaker's assistant was more sceptical than the coroner, or she might have been frozen to death on a slab at the morgue.

A woman well known in society for her lovely neck and arms polishes them, so it is said, for half-an-hour each night with chamois leather.

The electric railway has penetrated even the fastnesses of the Tyrolese mountains, a road twenty-seven miles long being projected between Riva and Pinzolo.

There are more than 6,000 co-operative societies in Germany.

Next year the University of Halle will attain the 200th year of its existence. It is intended to specially celebrate the occasion.

A DIVER DIES OF FRIGHT.

Became Entangled in Wires Under Water and Succumbed in Three Hours

An Ashtabula, O., special says:—Thomas Gray, an experienced diver, died yesterday afternoon while working on the wreck of the Pelican, off this port. Gray descended at 2 o'clock in the afternoon, and an hour later sent up distress signals. The attendants could not raise him, and telegraphed to Cleveland for a diver. The distress signals continued until 6 o'clock, when they ceased.

At 9 o'clock Diver Edwin Welsh went down and found that Gray had fallen through a hatch, and become entangled in some wires. When brought to the surface he was dead. The air connections were all right, and there was no water in the suit. Gray must have died of fright.

THE SHOOTING OF NEY.

An Eye-Witness Says It Was a Great Lesson in Learning How to Die.

"As to the confessor," said Marshal Ney "leave me alone. I have no need of black coats." At this last phrase, one of the two grenadiers in charge, rising, said to him: "You are wrong, marshal," and showing him his arm ornamented with several chevrons, added: "I am not as illustrious as you, but I am also a veteran. Well, never have I borne myself so boldly under fire as when I had previously recommended my soul to God."

These few words, pronounced in tones of emotion and solemnity by this colossus; appeared to make a deep impression on the marshal. He approached the grenadier and said to him with gentleness, tapping him on the shoulder: "You are perhaps right, my good fellow. That is good advice which you have given me." Then turning toward Col. Montigny: "What priest can I cause to be summoned?" "Abbe de Pierre, cure de Saint-Sulpice." "Beg him to come. I will receive him after my wife." The counsel of the old soldier had been listened to.

Ney refused, naturally, to place himself on his knees and to allow his eyes to be bandaged. He only asked Commandant Saint-Bias to show him where he was to stand. He faced the platoon, which held their muskets at "the recover," and then, in an attitude which I shall never forget, so noble was it, calm and dignified, without any swagger, he took off his hat, and, profiting by the short moment which was caused by the Adjutant de Place having to give the signal for firing, he pronounced these words, which I heard very distinctly "Frenchmen, I protest against my sentence, my honor—" At these last words, as he was placing his hands on his heart, the detonation was heard. He fell as if struck by lightning. A roll of the drums and the cries of, "Vive le Roi!" by the troops formed in square brought to a close this lugubrious ceremony.

This fine death made a great impression on me. Turning to Augustus de la Rochejapuelin, colonel of the grenadiers, who was by my side, who deplored, like myself, the death of the brave ces braves, I said to him:

There, my dear friend, is a grand lesson in learning to die."—[General Rochechouar

Nature's Love-Making.

The wooing of birds is most refined and graceful. Love tunes their respective pipes, and they seek to captivate their mates by their sweetest notes and most varied warblings.

The woodpigeon charms his lady-love by a series of aerial evolutions and a curious flapping of his strong wing feathers, puffing his breast and tenderly cooing.

At mating time the plumage of male birds is more handsome than at any other period —indeed, some birds assume different colors in the Spring.

Yellow-hammers charm their mates by displaying their tail feathers in the form of a fan, starlings chatter in the sunshine to show the metallic beauty of their breast feathers, and swallows circle and double in graceful flight before their lady-loves.

Bright shells, flowers, feathers, and grasses are laid by the bower bird at the entrance of his partner's retreat; and tiny humming birds woo most assiduously, showing off their lovely hues and engaging in fierce combat with a possible rival, even bringing nectar from choice flowers for the delectation of their fairy brides.

Hen birds exhibit all the vagaries of their sex, and pretend to be indifferent to the exertions of their admirers.

Frogs have an original way of love-making, and as soon as the evening shades fall, commence to croak loudly to their mates, sometimes great numbers of them combining in one unmusical chorus.

Courting among insects is often a very elaborate affair. A male spider will approach a female and amuse her for some time with his antics. It is said that he twirls around and around, crosses his legs, erects his body, and executes a sort of mazy dance to excite her admiration.

She is a very vicious lady, and not always pleased with his love-making. Sometimes he finds himself obliged to ward her off, for she has a painful mode of showing her displeasure, and if she entirely disapproves of his attentions will fall upon him and rend him to pieces.

One species of spider is said to have a novel way of making love, the sexes communicating by means of strands of web stretching from one retreat to the other—a sort of telephone, so to speak.

Glow-worms, according to some naturalists, use their luminaries as love signals The females of one species seat themselves among the grass, while the males, attracted by the light, dance attendance round them.

Concerning fishes, the sticklebacks occasionally resort to harsh treatment, attacking the females with open mouths and erected spines. As husbands their behavior is certainly eccentric, for after the female has deposited her eggs within the nest that he has prepared for her, her lord and master drives her away and proceeds to hatch them himself.

The descendants of a single female wasp will often number 25,000 in one season.

Recently two girls in a New York seminary were playing at leap-frog in their bedroom, and one of them struck her head with such force against the wall as to produce insensibility, which continued for several hours.

A fountain that stood for many years on the main street square in Pawtucket, R.I, has been removed and set up in a cemetery. Its base bears in big letters the touchingly appropriate word "Welcome."

A Gigantic Enterprise.

The opening of the Manchester ship canal marks the completion of one of the greatest engineering enterprises of the century. The canal is only 35½ miles long, but the undertaking has been carried through under circumstances of peculiar difficulty. From the beginning there were despondent citizens who prophesied that the scheme could never be carried to a successful issue. The Liverpool docks shipping interests and the railway companies which now carry on the trade between Liverpool and the interior at heavy transport rates, did all they could to throw cold water on the enterprise and find out its weak points. The promoters spent something like two million dollars before putting a hand to the work of construction. First the bill granting the necessary parliamentary powers passed the Commons and was rejected by the Lords. The next session it passed the Lords and was rejected by the Commons. When, at last, parliamentary powers had been obtained, there was difficulty in raising the necessary capital. This difficulty recurred again and again, for the actual expenditure largely exceeded the estimates owing to unexpected difficulties in the work of construction. The troubles of the company were increased by the death of the contractor, and there is no doubt that but for the generous assistance of the Manchester city council, the canal would never have been completed. When it is remembered that the financial resources at the back of the undertaking all came out of southeast Lancashire, some idea may be gained of the pluck and perseverance of the promoters. They poured money into the scheme when there seemed little hope of getting any return, simply because they had set their hands to the work and it would have been disgraceful to draw back. Lancashire may well be proud of the determination which has overcome so many obstacles of all kinds. The undertaking was one which would have severely taxed the resources of many a European nation. The total cost amounts to something like seventy-five million dollars, and as yet the returns have been insignificant. The construction has given employment to over ten thousand men, although 100 mechanical excavators were used, some of them able to dig out 200 cubic feet in an hour. Altogether 46 million cubic yards have been excavated, including ten million yards of rock, and for its removal 170 locomotives and 6,500 cars have been employed on 228 miles of railway specially constructed in and about the canal. The railways, roads, and rivers, crossing the canal have required the construction of numerous bridges and sluice gates, and a swinging aqueduct has been made to take over the waters of the Bridgewater canal. When a vessel wishes to pass, the current of the upper canal will be suspended and the aqueduct swung aside—a feat of modern engineering almost as wonderful as some of the miracles of the Old Testament.

Great difficulties have been encountered in the construction of the embankments near the Mersey Estuary, and again and again these have been swept away by the tide; but engineers who have inspected the complete work pronounce it to be solidly built. As to the future of the enterprise, and its influence on trade, it is perhaps too early to speak with confidence; but judging from the success of the Suez canal, the promoters will ultimately be abundantly rewarded for their enterprise. The Manchester merchants who now run their goods through Liverpool are directly interested in the prosperity of the canal, and will do all they can to make it a success. Within cartage distance of the warehouses there will be over five miles of docks, and the canal will be nearest point of shipment for some of the most important manufacturing centres in Lancashire and Yorkshire. The Lancashire cotton and engineering trades, and a good part of the Yorkshire cloth trade will find here their nearest outlet to the world, while the incoming trade will include raw cotton, lumber, and other materials for manufacture besides the various imports consumed by the thickly massed population of the North of England. Evidently so great an alteration in trade conditions may bring with it tremendous changes, not only for the port of Liverpool, but for the whole country. While Liverpool will undoubtedly suffer it is likely that Lancashire trade, as a whole, will be very considerably developed owing to increased convenience and decreased cost of transit. At present terminal charges and the short railway journey into the interior cost nearly as much as freight across the Atlantic.

Personal.

The Princess of Wales was 49 on Dec. 1.

The Scottish Home Rule Association has complained to the Prince of Wales of a lecture by Mr. Lecky, with his Royal Highness presiding, in which the British empire was spoken of as the "sole possession of Englishmen." This language has given the greatest offence to Scotland. The Prince replies, through his secretary, that he thinks that Mr. Lecky "had no intention of casting any reflection on Scotland or of ignoring the great services which the inhabitants of that country have rendered toward the creation of the empire."

Edward Barron, the San Francisco mining man who died a few days ago, landed in California at the age of 20 with 10 cents. He died worth $2,000,000.

It is feared that Princess Maud of Wales will ultimately lose her hearing. Her mother, the Princess of Wales, is almost totally deaf, and the trouble is hereditary.

Alphonse Daudet's thorn in the flesh is the letter writer. No other novelist, he declares, can be so pestered by unknown correspondents as he is. Women and young girls are the chief delinquents, their object in writing being to get him to use them as heroines in his next novel. They invariably inclose photographs.

In a little coffin about fifteen inches long the heart and other portions of the body of a man, whose disgrace and suicide last year brought about the overthrow of a cabinet, issued forth from the morgue in Paris a few days ago on its way to the Pere la Chaise cemetery. They were the remains of Baron de Reinach, who in the heydey of his power was one of the financial magnates of Europe, controlling even the destinies of ministers and influencing the policy of the nation.

The swan lives longer than any other bird. Some have died 300 years old.

Zinc in Germany is almost exclusively produced from native ores—calamine and zinc-blende.

TAMING MONT BLANC.

One of the Latest Achievements of the French.

A Wonderful Military Feat That Would Have Astonished the Great Napoleon—Heavy Guns Across the Alps.

For several years it has been known that the French army has been drilled and trained as it never was before, and that if war with Germany should occur again the Germans would have to meet the most skilled, most eager, and best-equipped foe that they have ever faced. The development in warfare by the French in the last ten years has been nothing short of wonderful. They had just added to their renown by performing a feat that doubtless would have astonished even Napoleon, with all his daring. They have taken field artillery across the Savoy Alps, southwest to Mont Blanc. They have reached crests with heavy guns which hitherto only eagles and chamois have attained. In other words, as the French expression goes, they have tamed a mountain. There are few readers who, in these days of improved geographical study, do not know that

MONT BLANC IS IN FRANCE,

but it is certain that many grown persons think it is in Switzerland. Every one who has read of the passes on its flanks; and all, young persons especially, know of the famous St. Bernard monks and dogs. We have all known that with staff and rope and guide it is possible even to reach the summit of Mont Blanc and other mountains but, no one has thought of carrying more than a few pounds of baggage for such a journey. It has been known that through the passes troops might defile and history records more than one of such famous events. Those of our readers who visited the Government Building at the World's Fair in Chicago must have seen how small pieces of artillery are carried over mountains on the backs of mules, the cannon itself being strapped on one mule, the wheels on another, and so on, until at least four mules are required to transport the

SMALLEST KIND OF FIELD-PIECE.

No one ever supposed that big cannon could be taken up icy precipices where there was no sign of pathway, where there was no vegetation except fugitive mosses, where no four-footed animal but the chamois could climb with safety, but that is exactly what the brave, hardy, and enthusiastic French troops have done. There has always been a fascination in reading of the "battle among the clouds" on Lookout Mountain in our civil war. The task of surmounting that was child's play to this

NEW ACHIEVEMENT OF THE FRENCH.

South of Mont Blanc is a valley through which a torrent river runs from the great glacier of the mountain. At the mouth of the valley is Bourg-St.-Maurice, where troops may be massed, and where there are heavy fortifications. An enemy from the Aosta Valley, in Itlay, could reach this valley by the Seine pass, but it would be useless to attempt to invade France because of these fortifications in the valley through which the hostile troops must pass. There is another way to get over into France, and that is over the Alps toward the west and down by Roseland to the little hamlet of Beaufort, from which there is a pathway, almost impassable, down the valley of the Doron. Individual men

MIGHT GET OVER THIS CREST,

but the idea of taking even a small cannon over it would have seemed absurb if it hadn't been done recently. The flank of Mont Blanc at this place is nearly 6000 feet high. it was decided by the French military authorities to make the trip from the Bourg-St.-Maurice fortifications with field cannon to Chapeaux, where there is a small garrison. With a prospect of victory for inspiration, a battalion of infantry, one of Alpine chasseurs, and a battery of Artillery started fron Bourg-St.-Maurice on July 17th last. An icy rain was falling, but the troops did not falter. They were to add to the glory of the army of France. Soon they were beyond the limits for safety for animals. It was impossible to go around the flank of the mountain. With ropes and pulleys, these men, with songs and shouts of encouragement to each other bent to

THEIR TASK OF RAISING THE GUNS

up the slippery heights. Fifty men pulled on the rope for each cannon, and at every tug each piece slowly mounted toward the sky. Obstacle after obstacle was overcome, and on July 20th there rolled out a sound over Mont Blanc's crags and glaciers and precipices that was never heard there before. It was the boom of a mighty cannon. It was an announcement of achievement rather than of defiance, and the cheers of the soldiers meant that the French artillery, as well as the infantry, had "tamed a mountain." The next day all the cannon reached the summit of the crest. Getting down on the other side was more difficult than getting up. The men and cannon had to go down the face of a slope 1800 feet high, and very steep. The work was done with ropes and pulleys, as in going up, and on July 21st Beaufort was reached. Surely the French have a right to be proud of

THIS EXTRAORDINARY ACHIEVEMENT.

They are now able to guard their Alps at their crests. They have shown splendid endurance, and shall we not say most commendable bravery? When in 1890 a French Alpine club, after two days, succeeded in reaching the top of Mount Sir Donald, in the Selkirks in British Columbia, from which they took some very fine photographs; when a party of Americans recently reached the summit of Mount Baker, in the State of Washington, after five days of effort, and there waved the American flag amid the smoking fumes of the mountain; when Mount Cook, in those famous New Zealand Alps, was conquered, two years ago, after a dozen attempts had been made when the top of Mount Kabru, in the Himalayas, was reached in 1883, the highest ascent ever made, 23,700 feet being recorded—the world that loves achievement and victory applauded. But all these tasks, difficult and splendid as they were not one whit more daring, more brilliant, or more glorious in their results than this achievement of the French troops.—[Harper's Young People.

Guttapercha was first introduced into Europe from Malaga in 1852. The annual consumption now amounts to some 4,000,000lb,