of the mine. The terrors of such places are not all imaginary. Sometimes the roof falls in, and the miners are buried beneath a mass of stones and earth; sometimes a sudden flood of water drowns them, and at other times they are destroyed by the gunpowder blasts with which they rend the rocks. These occurrences are not frequent, and yet they have all happened in the Owdin mine.

The greater part of the inhabitants of Castleton are miners. Their condition seems as unchangable as that of the Hindu casts, for altho' not made hereditary by the compulsion of law or the influence of religion, it becomes so by a kind of necessity, and thus men, women and children, from generation to generation, are all in one way and another, employed about the mines. Having thrown off my miner's dress, I went with another guide to see

The Speedwell or Navigation Mine.

This mine proved to be a very different thing from that which I had just left, and I found no difficulty in wearing my usual dress.

We entered a wooden door, placed in the side of a hill, and descended 106 stone steps, laid like those of a set of cellar stairs. The passage was regularly arched, with brick, and was in all respects convenient.

Having reached the bottom of the steps we found a handsome vaulted passage cut through solid limestone. The light of our candles discovered that it extended horizontally into the mountain, and its floor was covered with an unruffled expanse of water, four feet deep. The entrance of this passage was perfectly similar in form to the mouth of a common oven, only it was much larger, Its breadth, by my estimation, was about five feet at the water's surface, and its height four or five feet, reckoning from the same place.

On this unexpected, and to me at that moment, incomprehensible canal, we found launched a large, clean and convenient boat. We embarked, and pulled ourselves along, by taking hold of wooden pegs, fixed for that purpose in the walls. Our progress was through a passage wholly artificial, it having been all blasted and hewn out of the solid rock. You will readily believe that this adventure was a delightful recreation. I never felt more forcibly the power of contrast. Instead of crawling through a dirty passage, we were now pleasantly embarked, and were pushing along into I knew not what solitary regions of this rude earth, over an expanse as serene as the summer seas. We had not the odors nor the silken sails of Cleopatra's barge, but we excelled her in melody of sound, and distinctness of echo; for, when in the gaiety of my spirits I began to sing, the boatman soon gave me to understand that no one should sing in his mountain without his permission; and before I had uttered three notes, he broke forth in such a strain, that I was contented to listen, and yield the palm without a contest. His voice, which was strong, clear and melodious, made all those silent regions ring; the long vaulted passage augmented the effect; echo answered with great distinctness, and had the genii of the mountain been there, they would doubtless have taken passage with us, and hearkened to the song. In the mean time we began to hear the sound of a distant waterfall, which grew louder and louder, as we advanced under the mountain, till it increased to such a roaring noise that the boatmen could no longer be heard. In this manner we went on, a quarter of a mile, till we arrived in a vast cavern formed there by nature.—The miners, as they were blasting the rocks at the time when they were forming the vaulted passage, accidentally opened their way into this cavern.—Here I discovered how the canal was supplied with water; I found that it communicated with a river running thro' the cavern at right angles with the arched passage, and falling down a precipice twenty-five feet, into a dark abyss.

After crossing the river, the arched way is continued a quarter of a mile farther, on the other side, making in the whole half a mile from the entrance. The end of the arch is six hundred feet below the summit of the mountain. When it is considered that all this was effected by mere dint of hewing, and blasting, it must be pronounced a stupendous performance. It took eleven years of constant labor to effect it. In the mean time the fortune of the adventurer was consumed, without any discovery of ore except a very little lead, and to this day, this great work remains only a wonderful monument of human labor and perseverance.

During the whole period of five years that they continued this work, after they crossed the cavern they threw the rubbish into the abyss, and it has not sensibly filled it up.

They have continued to increase the effect of the cataract by fixing a gate along the ledge of rock over which the river falls.—This gate is raised by a lever and then the whole mass of water in the vaulted passage, as well as that in the river, presses forward

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towards the cataract. I ascended [illegible] a ladder made by pieces of timber fixed in the side of the cavern, and with the aid of a candle elevated on a pole, I could discover no top; my guide assured me that none had been found, although they had ascended very high. This cavern is without exception the most grand and solemn place that have ever seen. When you view me as in the centre of a mountain, in the midst of a vast where the regularity of the walls look like some vast rotunda, when you think of the river as flowing across the bottom of this cavern, and falling abruptly into a profound abyss, with the stunning noise of a cataract when you imagine, that by the light of fire work of gunpowder played off on purpose to render this darkness visible, the [illegible] of the cataract is illuminated even down to the surface of the water in the abyss, and the rays emitted by the livid blaze of this preparation, are reflected along the dripping walls of the cavern, till they are lost in the darker regions above, you will not wonder that such a scene should seize on my wondering soul, and fill me with awe and astonishment.

AGRICULTURAL.

For the KINGSTON GAZETTE.

MESSRS. EDITORS,

PRESUMING it to be your wish to make your paper as generally useful as possible, permit me to suggest to you the propriety of appropriating some of its columns to the purpose of diffusing improvements in agriculture; an art which is beneficial to all ranks and conditions of men, and in which a large part of your subscribers is exclusively occupied. Swift makes the powerful and benevolent monarch of Brobdingnag assert, "that whoever could make two ears of corn, or two blades of grass, to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together." But I presume not to arrogate such high pretensions in behalf of rural œconomy; or even to put it on a level with the lofty as well as profound speculations of Mr. Randy, on the usefulness of Balloons and the value of Grindstone Island; or the notable plan of another of your correspondents, who, because we have the misfortune to be overrun by quacks in physic, would sagely give the same free scope to pettifoggers in law; yet it would be no mean advantage to the community at large, and to the farmers in particular, if they could be cured of their prejudices against the cultivation of hemp; if they would learn to improve in the making and preserving of their butter and cheese; in meliorating that most useful vegetable the potatoe, and in increasing its quantity without taking up for it a larger portion of soil; if they would make themselves acquainted with the method of having constantly within their reach the best seeds for their fields and gardens; take some lessons for the better management of their orchards, and condescend to be taught how to make the most of the rich juice of their maple trees. As they are now probably awakened from the golden visions which allured so many of them into the lumber trade, they may be the more inclined to attend to what will more certainly and easily improve their circumstances, without carrying them out of their ordinary pursuits.

On all the abovementioned subjects, I am in possession of valuable papers, published by the agricultural society of the State of Massachusetts, and communicated to that society not by speculative, but by practical men, who have themselves experienced the advantages of pursuing the course which they recommend. Should you be disposed to approve of my plan, and give them circulation through the medium of your paper, they shall be very much at your service, and that of the public. Your obt. servt.

AGRICOLA.

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On the Culture and Curing of HEMP.

BY A GENTLEMAN IN MARYLAND.

THE extensive usefulness of hemp, the little interference of its culture with the other work of farmers in America; and, *when water-rotted*, the ease with which it is prepared for rope, as well as the general certainty of the crop with a good price, led me to admire it in preference to other uncommon articles of crop.

Much is said of the cultivation of hemp; and there appears a considerable variety in the modes of management. My practice was simple. Ground, level and rather low, not wet, and a mellow *loam*, whether of the sandy or clayey sorts, was preferred. These soils are not cold; and when well cleared and prepared by repeated plowings and a due quantity of manure, they are in condition to yield *many repeated crops* of hemp; a little manure being now and then added.*

Farmers without experience, if not also without thought on the subject, say their lands will not bring hemp. Most kinds of soil will yield good crops of it, if not wet. If poor, manure them. Every husbandman can manure and cultivate land enough for giving him rich crops of hemp. The plowings for reducing ground to a mellow garden-like state should be many, preceding the *first* sowing. Every time that young weeds appear, plow them in repeatedly. When the ground is thus well cleared of the seeds of weeds, then sow hemp-seed, and repeat it, year after year, on the same ground; giving it a little manure and *two autumnal plowings*; and the like plowings with harrowings in the next spring, immediately before sowing.

April, when the ground is moist, clean and mellow, in garden-like condition, from plowings and harrowings, is the time for sowing hemp. The plants then soon appear, and rapidly cover and shelter the whole surface of the ground; whereby weeds are kept under, and exhalation is greatly prevented. My hemp never suffered materially from drought but once, and that of a sowing in May. It was never found necessary to weed what was sowed for a crop; but only such as was sown thin for producing seed. Sometimes seed was saved from the margin of the field, where the plants had room to branch, and were coarse.

When the male or impregnating plants shewed maturity by some change in the color, and by the farina or dust flying off from the blossoms, all was pulled up, both male and female: and the pulling of every day was put into a salt water cove, in the evening of the same day, bound up in small bundles, and sunk 4½ feet in the water, in a thick square bed. The third day it was inspected; and from the third to the fifth it was enough rotted, as it is called. In examining it with finger and thumb some of the roots were broke. If they bent or were tough, it was not enough: when they snapt off short like glass, it was enough: but the bark also was tried. The hemp was then taken out of the water, and the heads laid sloping down to drain till morning; for it was usually taken out in the evening. In the morning it was spread, and whilst drying, once turned. In a few fair days it was dry, and then carted to an old tobacco house, where it was bulked up till the hurry of securing the other crops was over. It was broke and swingled in the next winter. Some of it was made into ropes for my farms: the rest sold to rope-makers, from the swingle. The rope was bright and strong, and sold to be of a quality entitling it to the bounty then offered for water-rotted hemp.

A small part of one of my crops of hemp was *dew* rotted: which was sufficiently disgusting to forbid a repetition of that mode. It was tedious while on the ground. Winds blew it about and entangled it. It rotted partially: not the whole of the same fibre alike. Here it was strong—there weak.

Where there is only a stream of water, it might be proper not to place the hemp in the stream; but, digging a deep oblong receptacle, let a sufficiency of the stream pass through it, when full, on one side of the natural current. There rot the hemp in clean water; which should constantly be coming into and passing through the pit, in a degree of plenty for preserving the water from corrupting or being stagnant; but not so rapidly as to fret off its bark.†

After pulling the hemp, weeds grew up; which were reduced, and the ground was left in clean condition till the spring by plowings.

Having no minute of the quantity of seed sown, I can only recommend what seems best. But it greatly depends on the state of the ground, and the purposes for which the crop is intended. A little experience will ascertain the proper quantity. Two bushels of seed to an acre, I believe, are a full portion for rope. A little less might be about the quantity sowed.

If the ground be good and well prepared, no crop is more certain than hemp sowed in time, and when the soil is moist. Hemp hastes the ground from May till about the 1st of August, and from early August it would be advantageously sheltered with a growth of buckwheat, till this blossoms; and then during a temperate state of heat, it is plowed in as a manure. Buckwheat must not run to seed on ground to be sown with hemp. I have had it spring up and contend with growing hemp, till the bark has been five feet high.

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* *Mr. Young speaks of a piece of ground at Hoxne, in Suffolk, England, which has been under crops of hemp for 70 successive years.*

† *The operation, improperly called rotting of hemp, ought to avoid every tendency to rot or ferment the plant. Water when pure and lively does not rot, but it dissolves a viscous gummy substance which had bound the fibres of the bark together and to the body of the plant. The purest water is the best dissolvent of such viscous substances. I have seen hemp which had been rotted in stagnant dirty water, the appearance whereof was bad. The hemp I rotted in clear tide water, had a light straw color.*

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COMMUNICATI[illegible]

MESSRS. EDITORS...*The establish in this place has been proposed, and has some interest. You will have the go[illegible] following thoughts on the subject, and*

A FRIEND TO [illegible]

IT is well known that but few [illegible] tive of good, can, (from the imp[illegible] nature) be carried into effect, with[illegible] tant evils. The establishment of th[illegible] would most certainly be attended wi[illegible] instance, the bank notes, when ise[illegible] greater or less extent, be counterfei[illegible] have a tendency, in proportion as the[illegible] injure the credit of the bank, would b[illegible] dividuals suffering impositions, and pe[illegible] a temptation to some to become that who would otherwise have remained [illegible] other objection which has been offered, [illegible] ty of giving the bills of the bank a cer[illegible] tain an extensive circulation. It is fa[illegible] in Montreal would be unfriendly to [illegible] at this place, and would not encourag[illegible] the bills: that a bank had already be[illegible] Montreal, but was found impractic[illegible] the only or the principal objections w[illegible] offered, to the establishment of the [illegible] On the other hand, I believe it w[illegible] that, could these evils be done aw[illegible] would result as well to the public a[illegible] from such an establishment. If we wi[illegible] dents, we have only to refer to our mo[illegible] country, and to almost every wealthy and com[illegible] in Europe. If we look to the *Uni[illegible]* there find that the banking system h[illegible] of much good, and we cannot deny [illegible] sequences. But the evils resulting [illegible] the United States are of such a [illegible] prevail in this place: the principa[illegible] a want of specie to form sufficient [illegible] payments of their notes. In [illegible] known, a number of banks have [illegible] and I am certain if we inquire th[illegible] it to have been the one I have n[illegible] valry and misunderstanding wh[illegible] to exist among the several banks [illegible] their earliest establishment. I [illegible] generally known, that when the[illegible] one fourth the number of bank[illegible] the specie was almost totally a[illegible] vaults, and those who afterwa[illegible] depended on collecting bills on [illegible] drawing the specie from the va[illegible] created a rivalry and a warfa[illegible] generally in New England, and [illegible] ceptions. The banks which ha[illegible] considered the specie but lent, [illegible] bills of the new bank in circ[illegible] immediately collected for the [illegible] their specie; and to so great an [illegible] multiplied, that the scene at [illegible] on the remove from one bank [illegible] are evils which certainly cannot [illegible] country at present exists. [illegible] would be the only one in Up[illegible] therefore there would be no r[illegible] be immediately collected. W[illegible] States. The former of the evils which I have [illegible] tioned, I believe need not form a very formidable [illegible] jection. The counterfeiting business, both in [illegible] country and in the United States, has been carried [illegible] a very great excess. Many had formed visionary [illegible] sanguinary expectations of fortunes to be made by it; [illegible] but I believe experience has pretty generally convinced [illegible] these adventurers of the fallacy of their expectations. [illegible] At first their success was somewhat flattering, but at [illegible] present the whole community is on the vigils to detect [illegible] them. People, from experience, have become better [illegible] judges of bills; the late acts in Canada have dissipated [illegible] the principal nests of counterfeiters in this country; [illegible] and I am convinced, from these and other causes, the [illegible] rage of counterfeiting is now on the decline. The [illegible] disease has arrived at its acme, and it is hoped is about [illegible] to be cured.

For the KI[illegible]OSTON GAZETTE.

MESSRS. EDITORS,

DIFFERENT writers in your pa[illegible] per, have expressed their different opinions [illegible] respecting the present apportionment of high[illegible] way labor, according to which the lowest [illegible] rate cannot be less than three days a year, [illegible] nor the highest more than twelve days. [illegible] Without undertaking to decide the question [illegible] of proportion, I cannot forbear observing [illegible] that this tax, like our other taxes in [illegible] ral in this Province, is light, compare[illegible] those of other countries, and even the neigh[illegible] boring States. As our highway [illegible] payable in labor, they are easily pa[illegible] I am sure no rateable inhabitant [illegible] complain of being required by law [illegible] tribute three days works in a year [illegible] improvement of the public roads, es[illegible] as his other taxes are so inconsiderable. The [illegible] burden of roads is reasonably expected to be [illegible] heavier in a new than in an old country. [illegible] This Province is still comparatively new; [illegible] and, as one of its inhabitants, I wish that [illegible] much more labor were required of us for [illegible] this valuable purpose. It would be good œ[illegible] conomy. The utility of a safe, easy and [illegible] expeditious communication, between the cen[illegible] tre and the remote parts of the Province, [illegible] is not duly estimated. It is the main artery [illegible] to the body politic. Leaving it to those, [illegible] whose proper office it is to apportion and ap[illegible] ply the public contributions, I would merely [illegible] ly invite all men of public spirit, in [illegible] of the legislature, to unite their influence [illegible] and exertions in the important object of im[illegible] proving our great post road, up and down [illegible] the river and lake, from the Lower Province [illegible] ince to Kingston, York, Niagara, &c. Other [illegible] er roads are important, in proportion to the