

TERMS.

THE MILTON SPECTATOR is published every Tuesday morning at the price of Two Dollars and Fifty Cents per annum, if paid before the end of the year. If payment be delayed beyond that time, Three Dollars will be charged. No subscription received for a less term than six months. Subscribers who do not give express notice to the contrary, will be considered as wishing to continue their subscriptions, and the paper will be sent to them accordingly. No paper will be discontinued until all arrears are paid, except by the direction of the Editors.

Any person procuring six responsible subscribers will be entitled to receive the Spectator one year gratis.

Advertisements making fourteen lines or less will be inserted three times for one Dollar, and fifty cents for each continuance—except notices, which will be invariably four Dollars. The usual allowance will be made to those who advertise by the year.

B. All who possess the leisure, &c. are respectfully invited to favor the Spectator with their communications, all of which shall receive the attention due them.



AGRICULTURAL.

From the Cultivator.

A HINT TO FARMERS—GREAT VALUE OF APPLES.

J. Buel.—In the fall of 1828, I gathered about one hundred and fifty bushels of good sized apples, of different kinds, and put them into my cellar, for the purpose of feeding them out to my stock of cattle and pigs, to see what effect they would have. When hard weather commenced, I had two cows that gave milk; I put them into a stable and commenced feeding the two cows with half a bushel of apples to each cow per day. I charged the boy that milked them, to see if the cows increased of their milk, and the third day the boy says that the cows gave almost double the quantity that they did before I fed them with the apples, and the young woman that had the charge of the milk, says that the butter that was made from the milk at the time of feeding them apples, was of a fine flavor, and a fine yellow color.

I likewise commenced feeding them to my pigs: I fed about one bushel a day to thirteen pigs, with a small portion of corn, and I now defy the state to bring thirteen as good pigs as mine, that has had no better keeping.

I had gathered about 250 bushels of good sized apples, and put them into into a good bin in my carriage house, with the intent of making them into cider, the cold weather came on, and all my apples froze immediately covered them with blankets, and they remained in that situation till a thaw, in the latter part of December; I then commenced feeding them to my stock of cattle, such consisted of twenty two head and ten colts; I fed them about ten bushels per day; I soon found that my cattle would not eat half the quantity of hay that they did before I commenced feeding them apples, and when the apples were gone, I could see that my cattle had gained in flesh, and looked better. I think that my apples that I have fed out to my stock of cattle this winter, has been worth to me more than though I had made them into cider and sold it for one dollar per barrel.

This from yours, etc. ELEAZER CADY.

Canaan, Feb. 16, 1836.

Note.—A gentleman of Montgomery, informs us that he has derived like benefits from storing his apples and feeding them in winter, to his stock, and that a horse which had for a long time been afflicted with the *heavens* and to cure which, every previous prescription had failed has been restored to entire health by this apple diet.

PRESERVING GRAPES.—Horticulturists have long sought for a practicable method of preserving the grape of our climate, the Isabella fresh through the season, but hitherto without success. The present of a bunch this morning from our neighbor, Mr. Charles A. Harrison, of Newark, New Jersey, give us *delicious* evidence that the desideratum has at length been attained. Mr. H. assures us that this bunch is a part of about two bushels which were taken from the vines on the 17th September last, now six months ago, and they are still as fresh and plump and luscious as the day they were plucked. The stems, too, are yet as green and unwilted as ever.

Mr. H. has given much attention to the subject for some years, and after a variety of unsuccessful experiments is now fully satisfied of his success. The process of preservation, the knowledge of which, for the

present at least, Mr. Harrison reserves to himself; is said to be entirely simple and practicable, so much so that when the vessels are once procured, a hundred bushels of the fruit may be preserved at an annual average cost of about one dollar. The imported grapes sell in our market at this season for about 50 cts. a pound; at this rate a bushel of the Isabella, which we believe ordinarily weighs about 40 lbs. would be worth \$20, and, preserved as in the specimens before us, they are preferable as a delicacy for the table.—*Newark Daily Advertiser* of March last.

SPRING WHEAT.

To the Editor of the Richmond Enquirer. ROME, N. Y. Aug. 23d, 1836.

DEAR SIR:—I have your esteemed favor of the 17th, and am gratified at your favorable notice of my communication. I reply forthwith, in order to give you the earliest information on the subject of the Italian Spring Wheat; and also to correct the error which I see you, in common with other southern gentlemen, have fallen into. The Spring Wheat is what it imports—a Spring-sown grain—matures in three or four months from the time sown, after a corn, or other crop in the Fall: the ground should be ploughed, when practicable; still, it will answer without, if well ploughed in the Spring. It should be done early, and early sowed; although it has done well here sown as late as 10th May. Much depends on filling well—but it requires less strength of soil than winter Wheat. It has so far (now the 4th year) escaped the ravages of the fly and the danger of loss of crop by winter killing is wholly obviated. Some oats will be found mixed with every sample in the place. These, if you are very particular, should be picked out by your blacks; or most of them may be got out by running through brine, (strong,) when you sow, and skimming them off. The brine benefits the wheat, as does plaster also.

I send inclosed a few kernels of the Wheat grown this year—the head from which I shelled it, measured five inches. I will send you 2 barrels—say 7 bushels; price \$7 per barrel, or \$2 per pushel, including cask and cartage—and will draw for it as you suggest.

We sow 1 1/2 to 1 1/2 bushels per acre. It is a bearded Wheat, and stands here 3 to 3 1/2 feet on a level.

I am, sir, very respectfully, Your obedient servant,

JAY HATHEWAY.

The Specimen may be seen at this office. It is a beautiful, transparent, white Wheat—and we are advised, that it will make first rate Flour. It is certainly worth trying. Farmers who wish to make the experiment, had better address themselves directly to Mr. Hatheway, P. M., at Rome, N. Y. and make the necessary arrangements through a bank, or merchant of Richmond, Petersburg, &c. &c. We subjoin the following article, by way of supplemental information, from the Telegraph of the 23d August, printed at Rome, N. Y.:

Crops.—Winter Wheat has come in very light, less than one-fourth the usual yield in this vicinity. Winter, (killing in most and rust in some places,) has destroyed the crop.

Italian Spring Wheat.—This new and excellent variety was imported four years since, from Florence, in Italy, and has hitherto succeeded well, and more than exceeded the expectations of our agriculturists. It is unusually fine this season—is a bearded grain, heavy and of fine color—grows well on a variety of soils, and even on ground much worn, and yields from 20 to 30 bushels per acre.

The true economy of housekeeping is, simply the art of gathering up all the fragments, so that nothing be lost. I mean fragments of time as well as materials. Nothing should be thrown away so long as it is possible to make any use of it, however trifling it may be; and whatever be the size of a family, every member should be employed either in earning or saving money.

Commerce of Liverpool.—It has often been disputed whether the commerce of Liverpool was greater, or less, than that of N. York. The number of vessels arrived at Liverpool during the month ending 24th June last, was 1311, of which 1100 were coasters; leaving 211 which arrived from foreign ports or from the British colonies. During the whole year ending 24th June, the number of arrivals was 14,959. Admitting the proportion to hold between coasting vessels and those from foreign or colonial ports, the number of the latter during the year would amount to 2,869. But it is to be presumed that in the winter months the proportion of long voyages is less than in summer. The number of arrivals at New York from foreign ports in 1835, was 2,044. In regard to the coasting trade we have no means of comparison.

From the Farmer's Register. REPORT.

On the Navigation of the Upper Roanoke by means of Steamboats of shallow draught.

Lawrenceville, Va. June 20th, 1836.

To Col. Andrew Joyner, Superintendent of the Roanoke Navigation Company.

SIR—Agreeably to the order of the board of Directors, made at their meeting in April last, I set out on the 12th day of that month, to perform the duties assigned me. The people of Clarksville, most promptly and liberally responded to this effort of ours, by appointing Tucker Carrington, Esq. to accompany me, from whom I received much assistance.

From the Hon. Walter Gales, and the Hon. B. W. Leigh, we obtained every assistance they could give us in our investigations, by procuring and giving us letters to all persons in our route most capable of aiding us in obtaining the information we were seeking. These letters enabled us to make the acquaintance of many persons in the City of New York, and the States of Connecticut and Massachusetts, best acquainted with the subject of steam navigation in shoal water. In T. B. Wakeman, Esq. of the American Institute of N. York, Alfred Smith, Esq. of Hartford, Conn. and Charles Stearns, Esq. of Springfield, Mass. I found gentlemen well acquainted with the subject, and who were not only willing, but did put themselves to much trouble and inconvenience to oblige and assist us in every thing we desired. And although we applied to no one who did not manifest the greatest willingness to assist us, yet I should be doing injustice to myself and to one of the most valuable and worthy men in New England, did I not in a most especial manner acknowledge the great service rendered us by Alfred Smith, Esq. Mr. S. like all his countrymen, is engaged in business, to which he devotes himself with great assiduity; and his worth being duly appreciated by his fellow townsmen, much of the public business is thrown on his hands. Notwithstanding all this—and although at the time of our visit to Hartford, he was superintending the erection of a large public building—he gave us many hours of his time every day, during our sojourn in that city. He had been superintendent of all the improvements on the Connecticut River, and knew all the facts in relation to them. He gave me a duplicate of the profile of the canals and locks around the falls; and a survey of the river, made under his direction; which I will send you for the use of the Roanoke Company, by the first opportunity.

Every person to whom we mentioned the object of our visit to the north and east, invariably directed us to Thomas Blanchard, as the man to be consulted and employed by us. Indeed the unanimity with which all recommended Mr. Blanchard, was astonishing—but when we went to Hartford and Springfield, and saw the steamer Massachusetts, ascending the Enfield falls, and what he had done in the United States' Armory at Springfield, we too, had no doubt of Mr. B's ability to put steam-boats on the Roanoke, if mortal man could.

This extraordinary man was a common artisan in the United States' Armory at Springfield, and I was told by Col. Robb, the superintendent, that he had added improvement to improvement in the machinery there, until it would seem to be as perfect as the art and wit of man could make it—the principal of which, however, is the machine for turning gun stocks, and any irregular figure. But the improvement for which, perhaps his country will be most indebted to him, is his steam-boat for shoal water—it might be more appropriate to call it an invention—for it is built on a new principle. This gentleman I lost no time in engaging for our service; provided you should sanction it. By promptly adding your request to mine, you will soon have an opportunity of learning from Mr. B. himself, what he has done, and what he can do on our river.

I shall now proceed to mention such facts as I have collected, and I shall also venture to give you some conclusions I have drawn from those facts. Being, however, entirely ignorant of engineering (never having had my attention directed to such pursuits,) my conclusions must be received with great allowance.

The better to appreciate and apply the facts to be detailed, some account of the Roanoke, Dan and Staunton Rivers, will be necessary. The facts here stated of those rivers, are extracted from the surveys &c. of Messrs. Moore, reported after the death of the principal engineer, by Mr. Isaac Briggs, to the Board of Public Works. The distance from Rock Landing to Clarkesville, is 60 miles—from Clarkesville to the highest point of the survey up Dan, is 125 miles—and from Clarkesville to the highest point of the survey up Staunton, is 109 miles. The whole fall from Rock Landing to Clarkesville, is 156.60 feet—average fall, per mile, 2.61 feet. Whole fall from Clarkesville of

the 125 miles surveyed of the Dan River, is 277.47 feet—average fall per mile, 2.221 feet—whole fall of Staunton, from Clarkesville in the 109 miles surveyed, is 322.64 feet—average fall per mile, 2.96 feet. It will, from this, be seen, that the navigation of the Staunton is the most difficult—and that of the Dan the best of the three rivers.

In one material thing these surveys are very deficient; namely, the fall throughout each mile; for although a fall of ten feet to the mile, might be easily overcome, if equally distributed the whole distance, yet, as frequently the case, if the whole fall, or a large portion of it, occurs at one or two places in the mile, it might defy all the power of man or steam. In other instances too, the survey only gives the fall for two, three, four and five miles; and frequently from place to place, so that the distance cannot be accurately known. This occurs most frequently on the Dan and Staunton rivers; on the Roanoke, the fall in the mile is generally stated. The falls in the Roanoke, which require to be here noticed, are Eaton's, fall in the mile, 11.1 feet—Hamlin's Shoals, fall in two miles 16.11 feet. The next mile above these two, (having no name to designate it,) fall 5.93 feet. Pugh's falls, fall 5.62 feet—and Butcher's Creek, being two miles long, fall in one mile 5.60, and in the other 5.50 feet. On the Dan the only ones I shall notice, are those of Hyco—they being the only obstruction for some 50 or 60 miles above Clarkesville. These falls are about 1 3/4 miles long, fall 12.89 feet. On the Staunton, Fally's falls are the only obstacle to Brookneal—and it is useless to notice any other on that river. Here, the survey is too inaccurate to enable me to ascertain the distance to which is affixed the fall mentioned; but as well as I can understand it, the rapids must be about 1 3/4 miles—in which distance, the whole fall is 15.23 feet.

I will now beg leave to conduct you to the Connecticut River, and lay before you some minute statistics. From Hartford (below which, the river is free from any obstruction) to the foot of Enfield falls is 12 miles—fall, not more than two or three inches to the mile, and the water smooth. Enfield falls are nearly five miles from head to foot; with one mile of slack water between the upper and lower falls. The lower falls extend nearly 2 1/2 miles (half a mile of which is slack water) and has 20 feet descent—principally, if not entirely, confined to two miles: within these two miles, there are a succession of rapids—one or two of them greater than the others. After the termination of the lower falls, one mile in length, and leaving a descent of 10 feet—the descent is unequally distributed, being most of it in three bars, namely—at Enfield bridge—Mad Tom Bar—and Surf Bar. From the head of the falls to Springfield, is 8 or 9 miles—and from thence to the foot of Headly falls, is about 8 miles farther; making the distance of 16 or 17 miles, from one fall to the other—in all which distance there is slack water, and fall of only a few inches to the mile. One mile below Hadley falls, however, you have Williamansett falls, being not quite such hard water as upper Enfield falls. Hadley falls have a descent of 50 feet in 2 1/2 miles, around which there are locks and a canal through which, all boats and rafts are obliged to pass. From the head of Handley's falls is 35 miles—with sand and gravel bars—having by actual admeasurement, only between 8 and 9 feet fall in the whole distance. Above Miller's falls there is more rapid water, where steam boats have been tried without much success—owing, it would seem, more to the want of employment than to their inability to navigate the river.

But to return to Enfield falls (where we have actual experiments and well attested facts for our guide)—several boats were put on the river and abandoned, before they got one to succeed. There are now two passage boats, and I believe two tow boats. The passage boats, are the Vermont and Massachusetts—the former, intended to run in low water, is 75 feet long—including wheel, 13 feet wide—draws 19 inches. The Massachusetts is 97 1/2 feet long, including wheel (which is in her stern) 13 1/2 feet wide—draws 22 inches of water when laden, and has two engines of 17 1/2 horse power, each. Aboard of this boat I passed over Enfield falls, three times. She can carry 75 passengers, has no accommodations for night or meals—but comfortable cabins for both ladies and gentlemen. In ascending the lower rapid 2 1/2 miles, she cleared them handsomely and with ease, in 42 minutes, and she went up the upper falls (being exactly one mile) in 23 minutes by my watch. Descending, little or no steam is used—ascending the boat is quite obedient to the helm; but when the current is extra strong, poles are used to keep her steady—descending she is also steered by a tow oar. She makes a daily trip from Hartford to Springfield, 26 miles, and back—going up in 5 hours, and returning in 2 1/2 hours—

has run with regularity and entire success, for four years; and is considered as good property, as any in New England. She, as well as the Vermont, was built by Thomas Blanchard. Her crew consists of 5 hands, including captain and pilot—her expenses are about \$100 a month; and cost about \$6000; but owing to the advance in labor and materials, it is probable that such a boat, would now cost more.

Around Enfield falls as well as the other falls on the river, there are locks and a canal through which the freight and tow boats pass—though the tow boats have gone up Enfield falls it is found to be best to go through the canal. These two boats can carry 150 tons, at the rate of 2 1/2 miles an hour—against the current of 1 1/2 miles an hour; but experience proves that towing less than that, is much better. The William Hall, one of the tow boats, has ascended a rapid of 9 feet in the mile, towing up 20 tons—her engine is 20 horse power, and she cost between four and five thousand dollars. At Hadley falls, after the freight boats get through the canal, they are taken in tow by another tow boat at the head of the falls, and carried up to Miller's falls.

Before steam boats were used on this river, above the falls, the trade was carried on by means of freight boats of 25 tons, with a sail to be used when the wind was fair; When these boats ascended Enfield falls, they took in additional hands, so as to have one hand to the ton, when they were propelled by poles; and I was told that it was as hard labor as men could endure: it frequently consumed the whole day to get one of them over the falls, 5 1/2 miles. Here, steam has succeeded, both as applied to passage and tow boats—and it would seem from this, that where a man can push a ton up a current, by means of a pole, steam can be employed with success, profit and regularity.

The Connecticut upon an average, can only be used for navigation seven months in the year—it is ice-bound for three months and a half, (last year much longer,) and the water is too low for one and a half months in the summer. I saw Mr. Goddard in Hartford, who is the proprietor of the steam-boats on the Altamaha, Ockmulgee, and Ockonee rivers, who informed me that they were entirely successful. I was also informed by Mr. D. Copeland, of Hartford, that he had succeeded in putting a steam-boat on the St. Lawrence, where the fall was much greater than at Enfield; but I was unable to get the particulars in consequence of Mr. Copeland's being obliged to leave Hartford for N. York, unexpectedly. Mr. C. is an engine maker of high reputation, and a man of high standing. Mr. Blanchard has also succeeded (though not to the same extent that he has on the Connecticut,) in putting steam-boats on the Kennebeck, Genesee and Susquehanna rivers: in the latter he informed me that he had ascended some half a dozen mill dams. This boat however did not run long and she has not been repaired, or replaced by another.

Here, perhaps, with strict propriety, my communication should close; but some opinions must necessarily have grown out of what I have seen and heard—and I hope I shall be pardoned for expressing a few of them. This, however, considering the position of things, may do little else than draw forth a denial of the facts stated, and unfriendly criticisms on the conclusions and reasons which I shall give. The improvements made by the Roanoke Company have brought into existence so many rival schemes for monopolizing the trade of the upper country, that almost any opinion which may be expressed, will be *charitably* ascribed to a wish, to promote one, or put down another. I have what to me is a considerable interest in the Roanoke Company and I am entirely unconnected with any other of the various and conflicting interests, or pertaining to the river. I have looked at the subject exclusively as a stockholder of the company—and everything I have done, and what I shall say, will have no other end in view, but the advancement of its interest.

The most important conclusion I have come to, is, that steam-boats can be put on the Roanoke and its two principal tributaries, with profit and success—whether they will be able to navigate the whole of the Roanoke, Dan and Staunton, remains to be tested by actual experiments; but that they can be successfully and profitably employed on a large part of all three rivers, and that too, without the company's incurring much expense in further improvements of the beds of the rivers, I have as little doubt as I can have of anything not yet demonstrated. The facts above stated, I think abundantly warrant this conclusion. There is but one fall on the Roanoke greater than that of Enfield; there is not one on Dan or Staunton, for a considerable distance up both streams so great. Why then, (it may be asked,) may we not ascend our rapids as well as they do those on the Connecticut?