

# RALEIGH STAR & N. CAROLINA GAZETTE.

THOS. J. LEMAY, Editor and Proprietor.

"North Carolina—Powerful in intellectual, moral and physical resources—the land of our sires and the home of our affections."

[THREE DOLLARS a Year, in Advance.]

VOL. 39.

RALEIGH, N. C. WEDNESDAY, JULY 5, 1848

No. 57

(Continued from fourth page.)  
and in manufacturing populations it would also create a greater traffic upon the railways, and enable them still further to reduce their rates; and as the heavier articles are more consumed by the working classes, it would add very much to their comfort; and there are great tracts of country which would be cultivated to much advantage, if favoured with railway communication, which are now allowed to lie comparatively barren.

Looking, therefore, to those results, ought not railroads receiving high profits to be obliged to extend branches laterally to districts which want of communication has left in comparative unproductiveness?—I think so; it has occurred to me upon this point, that it would be a great advantage if, by some public authority, the country should be divided as regards railways, into sections, so that there might be systems of railways established for those different sections, according to their respective wants; a system so established would be enabled to provide branch railways into districts which could not of themselves afford to pay for a railway; they would be enabled to do that, because this branch, though it did not pay it itself, would pay as part of a general system; in consequence of the additional traffic that it would bring upon the line.

Referring again to the benefit to agriculture from the introduction of railways, and consequently of cheap conveyance, can you give the committee any particulars of the advantage of the transport of the carcasses of animals, as compared with the old system?—Without a railroad it is impossible to transport fat cattle any greater distance than from 50 to 70 miles, without very great deterioration; but railroads will afford the means of transporting those cattle 300 or 400 miles with great advantage, and in carcasses they may be transported 700 miles; and in that way meat may be brought from the most distant parts to populous districts at a very small additional expense, which, with the expense for transporting either beef or mutton in the carcass, does not amount to more than one-third of a penny for five hundred miles, so that you may have meat nearly as cheap in London as you have it in Liverpool.—There is another great advantage arising from this easy and cheap mode of transit, which is, that the little country butchers, who purchase lots of cattle and sheep for the consumption of the town or village in which they may live, always find among those lots a few that are of too good a quality for the consumption of their particular district; and if they are enabled to send them to a great distance to a more wealthy part of the country, they not only supply those rich communities with the superior article that they want, but they can supply it at a cheaper rate; and again, this enables them to sell the medium and inferior animal at a lower rate to the consumer in the country; so that both the rich population of towns are benefited, and the poor of the districts where the animals are killed are very much benefited.

Is there not a demand in large towns for picked joints?—There frequently is; and I know, from the inquiries I made in Yorkshire for the Direct Northern Railway, that the butchers are contemplating, when that railroad communication shall be worked out, to send the surplus of their better joints to the London market, which will enable them to sell the inferior parts to the working classes at a lower price.

In short, quick conveyance enables them to dispose of the whole animal in the best market?—Yes.  
By the former mode of conveyance there was no possibility of carrying killed meat any great distance?—It was quite impossible. There is another great advantage in killing the animal in the country districts; the offal or inward parts of the animal are available to the working classes of the district, and there is an immense quantity available for manure, which when brought to those large towns is a nuisance, in the country it is of great value.

Have you anything to add in explanation upon the points upon which you have now been examined?—I have several tables to give in illustrating the different points upon which I have been examined. I have no doubt that railroads will do more for communicating intelligence amongst the general community than even the press has done, inasmuch as seeing a thing is much more than hearing of a thing, and there will be much greater progress made in the diffusion of improvement by railroads than by any other means.

British Farmers' Magazine.

A penny saved is a penny made.

## Wool Trade of the United States.

This article promises, at no distant date, to become of first-rate importance. The present growth is much greater than we in this country have generally, an idea of, being upwards of sixty millions of pounds weight at the lowest estimate, far exceeding their domestic requirements. It is important to notice the great weight of the fleece, which is nearly double that of any other country producing similar qualities; and when we consider the facilities for extending the production, there cannot be a doubt that, in a short time, the quantity available for export will be very considerable. Moreover, it appears that of late much attention has been directed to the subject in the Western States, with this view, as offering, to some extent, a more profitable return than the cultivation of cotton; and when it is stated that one pound of wool, nearly full blood, can be grown at the same cost as two pounds of cotton worth 6d., there is every reason to expect that the trade will eventually prove remunerating. The receipts last year were below the previous one, the consequence of former shipments generally not having been attended with advantage; but this is accounted for, to some extent, by the indirect channels through which many of the lots came, and their inferior condition in most cases. Until they are got up with more care, better washed, and more evenly graded, we see little prospect of a profitable result.—The greater part hitherto received has been so deficient in these essential requisites that purchases have been attended with extreme hazard to the buyer, which has operated much against their sale.—*British Farmers' Magazine.*

## FINE HOGS.

Burlington county, in New Jersey, has long been famous for its pork; and the poor house there has of late years, been very successful in slaughtering large hogs. The *Enquirer* of this city remarks: The Burlington county poor-house said to be altogether the best managed county establishment in the State—has produced this season, amongst other things, 63 hogs, weighing 26,750 lbs. The heaviest weighed 556; the smallest 327. Two yearling hogs weighed over 400 each. The average weight was 424 lbs.

Farmers' Cabinet.

## THE MURRAIN AMONG CATTLE.

At the monthly meeting of the Highland and Agricultural Society of Scotland, held at Edinburgh, on 12th of January last, the Secretary read a communication from the Board of Trade, to the effect that the epizootic, which was thought to be disappearing, had broken out with greater violence than ever among the horned cattle of Wallachia, and that three-fourths of those which had been spared from last year's visitation were falling victims to it. The Secretary said though the communication just read had reference to the state of the epidemic in a distant country, the directors conceived it to be their duty to submit to the public all information conveyed to them on so important a subject, in regard to which Professor Dick, who was present, had promised to give to the meeting the results of his experience. Professor Dick then rose and made the following statement which we give as of great interest to the public at present:

Professor Dick stated that pleuropneumonia was still prevailing with great violence, and varied with the weather. It existed at present to a great extent in East Lothian, as well as in Aberdeenshire, and throughout the North. He was informed yesterday, by one of his pupils, who is in practice at Maybole, in Ayrshire, there has only been occasionally a solitary case for fifteen miles round during the last twelve months. He considered its origin and propagation to be atmospheric, and attributable to influences to which man and the lower animals were equally exposed; in illustration of which the Professor referred to the existing epidemic in the form of influenza, under which he himself was evidently labouring, and in consequence of which the public schools have been partially closed. The disease consisted of active inflammation of the lungs, and in the pleura which covers them and lines the chest. It was attended with great danger, particularly when the pleura was principally affected; and such cases generally were fatal, unless the proper remedy was immediately applied; because, when that membrane is attacked by inflammation, being what is called a serous membrane, it very rapidly proceeds to pour out serum and lymph between the lungs and ribs; the chest fills with water, and the animal sinks and dies rapidly. Man, and all

the domesticated animals, are liable to disease, although they may not be equally affected at the same time. Horses, as well as dogs, during the present epizootic, have been less affected than cattle.

The disease is not, generally speaking, so fatal in horses as in cattle, because horses, being under continual notice, were better attended to; the symptoms were at once noticed, and they were seldom lost. The same would be the case with cattle, if properly looked after; but too little attention is paid by the breeders and rearers of cattle to the health and comfort of their stocks and the symptoms of their diseases; they, at the same time, are not so much under the immediate observation of their owners. Indeed, the early symptoms very readily escape the notice, because they are obscure.

To illustrate the treatment required, the Professor referred to a case in Larnashire, where he had been called on for advice; his instructions to the smith or farrier on the property were, that he should bleed whenever he observed any cough or alteration in the milk or feeding; clean out the bowels by laxative medicine, say one pound of epsom salts, nitre, tartaric acid in large and repeated doses; repetition of bleeding; blistering the sides, and even firing, if necessary. After the inflammatory action has been subdued, tonics should be administered. By following this course, the smith has acquired a local celebrity. It was sufficiently simple, if adopted at an early stage of the disease; but if the disease has made a certain progress, no reasonable hope of success can be entertained.

London Farmers' Magazine.

## PRESERVATION OF FOOD.

The preservation of food has at most periods been an object; but the usual processes of man have been, for the most part, little in advance of the squirrels and other animals; less than those of the bees, which have an instinctive perception of the true principle, viz., the exclusion of air, which they accomplish by hermetically sealing up their honey cells. In some cases this principle is aimed at, but in a clumsy way. Preserved provisions, as meal, fish, soup, and milk, are enclosed in hermetically sealed tin cases, and rendered durable for years. The air in these cases is excluded by the agency of heat and a partial cooking. The expense of these methods prevents their being more than a luxury. Potted meats are prepared with antiseptics and the air is excluded by a covering of melted fat.—Green fruits and vegetables are enclosed in sealed bottles, from which the air has been driven out partially by heat. Meats, antiseptically treated, are also preserved from the air by enclosing in a bladder or gut, in the form of sausages. Salted meat in brine is preserved partly antiseptically by the salt, and partly by immersion in the liquid brine. Smoked meats are preserved, partly antiseptically by the empyreumatic acid, and partly by the watery particles being driven off by heat, so that the meat becomes a kind of glue, and the air is excluded. Dry cakes of glue may be preserved any length of time; but if they be moistened to admit the air, they soon putrify. The charqui or jerked meat of Southern America is made into a glue by the heat of the sun, and thus assumes the character of cheese; decomposing by mites in the same manner. Dried flesh of this kind, mixed with butter or fat, is the pemican of North Western America, from which air is thus excluded. Egyptian mummies have the air excluded by bandages. There are various modes in which grain is preserved, some intentional, some accidental. What are called brewers' grains or spent malt, the cowkeepers in the neighbourhood of London seek to preserve by covering them over in pits. The air is not excluded, and therefore the method is inefficient. What is called mummy wheat, has been preserved by the effectual exclusion of the air. In Spain, wheat is preserved in what is called Silos, i. e., underground pits of peculiar soil, covered in with earth. Wheat thus treated lasts many years. The French armies were accustomed to hunt for these deposits for subsistence. A flat stone usually covered the opening; and on its removal a quantity of deleterious gas generally rushed out, sometimes killing the opener with asphyxia. In Canada West, hunters and Indians make deposits of corn and other things in artificial caverns called Caches, chosen in dry spots, and covered over. In some of the internal parts of Spanish America, the common granary is the skin of an ox taken off entire, and the legs and neck being tied round it, is filled with tightly rammed earth through a hole in the back, while suspended

between posts. When dried to a state of parchment, the earth is taken out, and the bloated bag, resembling a huge hippopotamus, is filled with grain, which is thus kept air and vermin proof.

Three conditions are essential to the process of preservation; viz: heat, moisture, and still air. With wind, moisture is carried off; with cold, the decomposing process is checked, as may be seen by the carcasses of animals that lie through the winter in snowy mountains, and dry up to glue. Without air, everything is locked up and remains in statu quo; as reptiles have been buried for ages in blocks of stone or ancient trees, and then resumed their vital functions, unchanged by time.

In direct opposition to these principles are the granaries of Great Britain and other countries constructed. Their site is generally the bank of a river, or the sea side. They are built of many floors at a vast expense. They are provided with many windows, each floor being the height of a man, yet not permitting more than twelve to fifteen inches depth of grain on each floor, for fear of heating, unless in the case of very old samples. Men are continually employed to turn the grain over, to ventilate it, and clear out the vermin; and the weevil is naturalized in every crevice, as surely as bugs in neglected London beds, or cockroaches in West Indian sugar ships. It is the admission of air that permits this evil, that promotes germination, that permits the existence of rats and mice. In the exclusion of air is to be found the remedy. The practicalization of this is neither difficult nor costly; on the contrary, close granaries might be constructed at far less proportional cost than the existing kind. They might be made under ground as well as above ground, in many cases better. They might be constructed of cast iron, like gasometer tanks; or of brick and cement, or of brick and asphalt, like underground water-tanks. It is only required that they should be air-tight, and consequently water-tight. A single man-hole at the top, similar to a steam boiler, is all the opening required, with an air-tight cover. The air-pump has long ceased to be a philosophical toy; and has taken its place in the arts as a manufacturer's tool; and no difficulty would exist as to that portion of the mechanism. Now, if we suppose a large cast-iron or brick cylinder sunk in the earth, the bottom being conical, and the top domed over; an air-pump adjusted for exhausting the air, and an Archimedean screw pump to discharge the grain, we have the whole apparatus complete. If we provide for wet grain; a water-pump may be added, as to a leaky ship. Suppose, now, a cargo of grain, partly germinating, and containing rats, mice, and weevils, to be shot into this reservoir, the cover put on and luted, and the air-pump at work, the germination would instantly cease, and the animal functions would be suspended. If it be objected that they would revive with the admission of the air, we answer, that the air need not be admitted, save to empty the reservoir. If it be contended that the reservoir may be leaky, we answer so may a ship; and if so, the air-pump must be set to work just as in the case with a water-pump in a leaky ship.

The cost of an underground reservoir would possibly be more than one at above ground, but it has the advantage of occupying of otherwise little value. One obvious cheapness of this improved granary over those now existing is, that the whole cubic contents may be filled, whereas, in the existing mode, not above one-fourth of the cubic contents can be rendered available. But many existing structures might be rendered eligible. For example: the railway arches of the Eastern counties, the Blackwell, and the Greenwich. In such cases the grain would be discharged into them from wagons on the line, in the mode used with boats. Reservoirs might be erected in farm yards, and the grain threshed out and carried from the harvest field direct, with the absolute certainty of preserving it any length of time that might be desired.—Or, inasmuch as it is a certain thing that all farms must ultimately communicate with railways, by means of cheap horse trains, or steam-sidings, in order to work to profit, it would be desirable that the granary should be erected at some central railway station, where a steam mill would do the work of exhausting the air, discharging the grain by an Archimedean screw when required, and grinding it into meal.

The same arrangements that are good on land are also good at sea.—Many cargoes of wheat have been abandoned owing to heat and germination on their passage. Rats, mice, and weevils, also, are very destructive. If the vessels were built of metalized, air-

tight compartments, the air might be exhausted by the pump, occasionally trying the pump to ensure against leaking; and thus even now, undried grain might be carried and delivered across the sea undamaged; the vessel would be more safe by means of air-tight compartments, and also more buoyant.—And the same arrangements would be equally available for various kinds of goods subject to damage in transit, such as are hermetically sealed in tin cans; and thus the expense of packing would be saved.

In reservoirs on shore the air might not merely be pumped out; warm air might be pumped in, to dry damp grain. Water might also be pumped in and out to cleanse the grain.

Similar reservoirs or magazines on a smaller scale might be constructed for butchers, or other provision dealers; and meat might be preserved fresh for weeks in the heat of summer, preventing the necessity of waste, or of selling at ruinously low prices; and so with fish brought to Billingsgate or other markets. On the same principle, there is no doubt that fresh meat, as sea stock, might be carried instead of salt meat, and that fresh provisions might be transported from any part of the world to any other part. Pork, or beef, or mutton, or venison, might be killed in America, and transported into England. Weevily biscuit would be a traditional commodity only in the annals of sailor craft.

"Water-tight compartments" is at present the expression for a safe ship. "Air-tight compartments" would be a term expressive of equal safety, and far more general utility. The expense of air-tight joints for the man-holes or openings would be but trifling. By the application of gutta percha, a perfect fit might at all times be ensured with scarcely any expense.

There can be little doubt, that with such arrangements, the prices of food would be far less fluctuating, and that it would become a practicable thing to borrow money on food as on brandy or iron, or any other commodity, when once its durability and unchangeability were demonstrated.—*Westminster Review.*

## NATURAL USES OF HAIR.

That hair effects an important purpose in the animal economy, we have evidence in its almost universal distribution among the mammiferous class of animals; and if we admit the analogy between the feather and the hair among all warm-blooded animals, additional evidence is obtained in the perfection of its structure, and again in its early appearance in the progress of development of the young. As a bad conductor of heat, it tends to preserve the warmth of the body; and in man it would have that effect upon the head, and serve to equalize the temperature of the brain. It is also a medium of defence against external irritants, as the heat of the sun's rays and the bites of insects, and against injuries inflicted with violence. Of special purposes fulfilled by the hairs, we have instances in the eyebrows and eyelids, which are beautifully adapted for the defence of the organs of vision; in the small hairs which grow in the apertures of the nostrils, and serve as guardians to the delicate membrane of the nose, and in similar hairs in the ear-tubes, which defend those cavities from the intrusion of insects.—*Wilson on the Skin.*

## Machine for Cutting Soles.

The Boston Rambler says: "Mr. C. D. Bigelow, of Marlboro, Mass., has invented a machine for cutting out soles for boots and shoes of every size and shape. The soles are cut out with the holes for pegs all punched, so that the pegs will be entirely dispensed with, if some arrangement can be made to punch the inner sole. This will be a machine of great value to boot and shoe manufacturers; and we believe it can be got up at but little expense, as it is very simple.

## Gypsum or Plaster of Paris.

To Chancellor Livingston is owing the introduction into New York, and the common use of gypsum or plaster of Paris, as a manure. About the year 1789, he began to make experiments on his own farm, and succeeding, he communicated his results to the farmers of the State. And in a few years he had the satisfaction of seeing it generally used. It is this chiefly which has given New York its present primary station among the United States.—The lands upon our Hudson river were fast deteriorating, having been worn out by constant tillage. On this account, the inhabitants of this district of country were fast removing into the more unsettled parts of this State, or more generally into some of the near States. But

the reasonable introduction and use of plaster of Paris renewed our worn-out lands, and brought them back to more than their original fertility. The depopulation of our State was prevented. Emigrations from other States were made into it; and New York, which in the year 1790 was only the fourth in population, and in 1800, only the third, at the last census in 1810, was the largest in population of any in the Union. But it not only made our inhabitants numerous, it made them industrious, prosperous and rich. The gypsum was the true philosopher's stone, which had been so long sought for. It turned everything it touched into gold.

To Chancellor Livingston this State is further indebted for the introduction of the Merino breed of sheep, and for the general emulation excited among our farmers, to rear and improve these valuable animals. The introduction of this was a consequence of the Chancellor's mission to France, and must be of the greatest and most decisive advantage to the United States. Already its effects upon our manufactures have been seen. The most affluent among us now feel proud to wear and to exhibit the fruit of our infant manufactures.

The American farmer feels a conscious greatness and independence, when he can appear clad in the vestments wrought by the hands of his sisters, or wife, or daughters. But above all, the real patriot sees and rejoices that our future dependence on foreign manufactures can be no longer asserted; and that our national wants can be supplied from our own internal resources, whenever the true policy of the government may require the measure. These are the consequences of the introduction of the Merino sheep. For ever honoured by his country be the man, who obtained the golden fleece, and returned with it to our shores; who has declared a second independence for our country.

Eulogium by T. Clowes.

From the Farmers' Cabinet.

## Take care of your Implements.

MR. EDITOR.—Nothing affords me greater pleasure, than the annual agricultural meeting which takes place around me, "topped off, as they are,"—as my friend Tomlings says,—"with an appropriate address, by some veteran in the cause." Many of these I make it my duty to attend; and perhaps one of the best speeches ever delivered on such an occasion, was that by Dr. Darlington, at the meeting of the Philadelphia Agricultural Society, at the Rising Sun, four years ago. It may be found at page 124, of the ninth vol. of the Cabinet; and to it, I often turn for reproof, my establishment bearing witness, that such "labour is not in vain." It is concise and plain, and coming home, as it does, to every man's business, the lessons that it teaches are easily remembered, and as easily practiced; the leading feature being the proper use and necessary care of our tools and implements. For a considerable time after its delivery, I could perceive its beneficial effects, in the general management of my neighbours' establishments; and I would add, in my own, in particular, to the present hour. I well remember, the first thing I did after it, was to repair my outer gate, which for years had been swinging in the blast, but never shutting; and the next, to build a shed, both wind and water-tight, for the bestowal of my implements, sufficiently large to afford "a place for every thing." Here, every tool is kept fit for use, out of the way of the drooping of the poultry-roost; by which so many of our implements, and even our carts and market wagons are disfigured; and especially our ploughs and harrows, which are generally left thus exposed for many months together, unless they are snugly packed away under the fence of the field last ploughed. I have seen many a pair of iron shoes five feet in height! Now I calculate, that my savings in the wear and tear of tools, since the delivery of that speech, have not been less than \$50 per annum; while I put down the time gained by having "everything in its place" and fit for use, worth as much more—a very pleasant mode of adding \$100 a year to one's income, on the faith of the old adage, "A penny saved is a penny got."

Travelling, some time since, through New Jersey, I noticed a large roller, on the frame of which had been erected a high roof, as a protection against injury from sun and rain; and seeing, the other day, a large and very expensively constructed double implement of this description, lying on Arch street wharf, with the name "Dr. Noble, Delaware City" on it, I would take the liberty of recommending the Dr. to follow the example, adding a seat for the driver; the oxen being easily guided, by a line