

COTTON SEED OIL.

From the Southern Banner.

ATHENS, July 30th, 1833.

Messrs. Editors.—As this is the age of improvement and all appear anxious to husband the resources of the country and to develop new ones, permit me, through your paper, to attempt to turn the attention of the public to one, which the South possesses in an eminent degree, and which has been suffered to remain unimproved, for the want of but a very moderate share of enterprize. I allude to the manufacture of cotton-seed oil. I propose to shew, first, its entire practicability and then its extensive usefulness, from which the inference will be readily drawn, of the great source of profit necessarily resulting to the cotton planting States. The difficulty heretofore, was the want of a machine to separate the kernels from the lint and hulls which absorbed the oil and prevented its complete extraction from the former. This has been entirely obviated by a machine, invented by our ingenious fellow-citizen, Lancelot Johnson, Esq. of Madison, Morgan county. It is as perfect for the purpose as it is possible, and it is altogether different from any thing of the kind heretofore invented. There is one in Virginia of another description, but in point of expedition and faithful execution, it is nothing to compare with Mr. Johnson's. That plan is a rough heavy stone cylinder turning within a semi-concave circle, brought so near together as to crack the seed and then they are sifted, and the hulls blown away by a fan. This plan is imperfect, because the hulls and lint are mashed into the kernels, occasionally. Mr. Johnson's is altogether different, and is upon the plan of an inverted cob or coffee mill. The hopper is circular and conical, and lined with steel plate teeth, chisel-edged, and spirally arranged from top to bottom. Within the hopper, which stands upon a square frame, and conforming to its shape, there revolves a vertical block around which are also inserted similar and corresponding teeth to those mentioned. The rows of teeth are then brought, by means of a regulator, just near enough together to cut the hulls of the seed as they pass through, and are there separated by an inclined rocking riddle and fan, perhaps not unlike a wheat fan. The operation is very perfect. Not a fibre is mixed with the kernel, and they drop as clear as cleaned rice and not unlike it, having about as many kernels cut in two, as the broken grains usually appearing in that article. It hulls twenty bushels an hour with a one horse power, and can be operated by a common rope band attached to the gearing of a cotton gin. It will cost about as much as an ordinary threshing machine. The press for expressing the oil, is the most expensive part of this business, and will cost \$750. Now, with such an establishment it is already ascertained that there is nothing easier than making the oil, and this brings me to the mention of its usefulness, premising that the facts submitted, are supported by either actual experiment or testimony of the most unquestionable character.

One bushel of seed will make half a gallon of oil, and this oil sells in the cities of Philadelphia and New York, for one dollar a gallon, when linseed oil is selling for ninety cents. The reason for this difference is owing to the greater number of uses to which it can be applied. In the first place, it is a decidedly better painting oil, and so pronounced by all who have tried it, particularly that distinguished practical citizen, Gen. David R. Williams of South Carolina. It is a most excellent lamp oil, and is in its use free from smoke or smell. It answers in the manufacture of woollens equal to any oil ever tried, and for greasing machinery nothing can exceed it. There are several minor uses to which it can be applied with singular advantage. It has a remarkable property, combined with rotten stone, in cleansing with unrivalled brightness, all kinds of metals and also Tortoise shell. When fresh it can be used in corn bread for the same purpose, and to as good an effect as lard, having nothing offensive in smell or taste, the latter resembling that of the hickory nut. The cake as it is called, that part which is left after expressing the oil, is superior, as food for cattle and hogs, to the linseed cake which always commands a dollar a hundred, and is known to fatten the finest beeves brought to the New York market. A bushel yields 12 1-2 pounds and is consequently worth 12 1-2 cents after the oil is extracted.

It remains to shew the immense advantage which is in store for this country, from this at present unimproved resource. The cotton crop of Georgia, for instance, is 250,000 thousand bales, which at the usual price obtained, is equal to 6,0000 of dollars.—In the seed, this crop weighs three hundred millions, and takes about 600,000 acres to produce it. The fibres when taken off, being one fourth of the weight, leaves two hundred and twenty-five millions of pounds of seed, which at thirty weight to the bushel, leaves in bushels, 7,500,000. From this quantity subtract one million and a half, necessary to plant 600,000 acres, and there will then be a balance of six millions, equal to three millions of gallons of oil or three millions of dollars, half the value of the cotton crop—one which is such a vast source of wealth to the people of Georgia. This is exclusive too of the cake, worth seven hundred and fifty thousand dollars more. In making these statements I am not unaware that I run the risk of being considered visionary, but I have the consolation of recollecting that such an idea was ascribed to a certain manufacturing establishment, not far from this place; but who considers it now as a wild project?

There is not one planter in twenty who has any idea of the quantity of seed he makes. For every thousand weight of seed cotton, there are 25 bushels of seed, which are worth to him in oil and food, at least 15 dollars, considerably over half the value of his cotton, and really worth more than an equal quantity of corn. The time will come when a man will just as soon think of throwing away his corn as his cotton seed.

It is contemplated to establish an oil press at this place, in connection with the company owning the Athens Factory. I give it as my opinion, no investment can be more profitable—it will be better than cotton spinning; because of the cheapness and abundance of the raw material, the great use and value of its production, the smallness of the capital necessary to be invested, its freedom from risk and the unusually moderate portion of manual labor used in its manufacture. If individuals engaged in procuring whale oil are compelled to make large expenditures in purchasing and equipping vessels, in preparing an expensive outfit for a dangerous and distant voyage of ten thousand miles, where they are cruising sometimes for three years, and then are able to realize an immense profit (making princely fortunes) at from 70 to 90 cents a gallon for their oil, what may not be expected from the production of a more useful oil, under facilities so obviously superior? Whale oil will be diminished in value, and we shall realize another great advantage in the retrenchment of our expenses for that article, and keeping our money at home. In conclusion. I ought not to forget the immense benefit our Rail Road will derive from this new pursuit.

A. S. CLAYTON.

P. S.—I have specimens of the oil and cake in my possession, and know that it is an excellent lamp oil. Its effect in cleansing metals and the tortoise shell I have witnessed.