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From Pastor's Sketches.

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### THE BROWN JUG.

In the course of my pastoral visits, I called upon a man who was a member of a congregation, a farmer, between fifty and sixty years of age; a plain man, accustomed to daily labor. He was not a communicant, and I had no reason to think him to be a pious man. He was a regular attendant upon the religious services of the Sabbath; but I had never seen him at any religious assembly at any other time. He was regarded as a respectable man, I believe, in all respects. His wife was a pious woman, whom I had sometimes conversed with, and who had expressed to me her anxiety in regard to the religious state of her husband. He had been for so many years living under the means of grace, without being led to repentance and faith in Christ; that she was afraid his mind had settled down upon some religious error, or into a strange stupidity, so that he never would become a Christian. She said she had often talked with him upon the subject of his religious duty; but he seldom entered into any free conversation upon it, indeed, "he would say nothing at all about himself." He would hear what she had to say; without opposition, and with apparent willingness; but he seldom made any reply, except to make some general acknowledgment of the importance of the subject. He had a family of children, the most of whom had already arrived at the years of manhood, and none of them manifested any disposition to obey the gospel in spirit and in truth. They were a moral and industrious family. The sons were much like their father, with the exception that they less frequently were seen at church. The family resided some distance from my residence, and I had not known them very intimately; except the mother, as the rest of the family were usually absent in the field, when I called at their house. Before the time to which I refer, I had never found this man at home; nor had I been able to converse with him at all in reference to his religious duty. Soon after I entered the house, his wife retired from the room, and left me alone with him. He immediately addressed him on the subject of religion. He appeared candid and pleasant. I found that he had no hope in Christ. He said that religion had, for many years, appeared to him as a solemn and important duty. He said he was fully sensible that he was a sinner in God's sight, and was exposed to his righteous justice. He referred to the sermons which he had heard from Sabbath to Sabbath; and said it was a wonder to him that they did not influence him more. But he supposed that he had "little true conviction of sin," and little sense of his real condition, or he should be a different man. In no manner he spoke of himself very freely for a long time. He appeared to me to be a man of respectable mind, rather thoughtful and in his sensibilities, but of sound judgment and of some discrimination. I urged him to give his instant and prayerful attention to his salvation; but he did not seem inclined to yield to my solicitation. I pressed it upon him strongly. I called to him the promises of God, made to them that seek him; and the threatenings of God against the neglectors of salvation. Still he appeared unmoved. I then concluded to put together, in a manner adapted to his cast of mind, some of the most urgent appeals that I could think of. I commenced. Said I: "You are already somewhat advanced in life. Your remaining years will be few. You have time to lose. You have lost enough already. If you do not become a follower of Christ soon, you never will. You have a family of children. You have never set an example of piety. You have never prayed with them as you ought to have done. Your neglect goes far to deprive all the influence which their mother might have over them. They copy your example. God will hold you accountable for a father's influence. You may be the cause of their ruin, because—"

to make any progress either in knowledge or sensibility. He did not go back; but he was stationary. He prayed in secret; he prayed in his family. He studied his Bible. He conversed with me freely. He sought opportunity for conversation. Uniformly he appeared solemn and in earnest. But he found no peace with God, no hope in Christ. Evidently he was in deep trouble of mind.

As he was not a man of much cultivation of mind, I aimed to teach him the truth in the most plain and simple manner. I proved every thing, and explained every thing. It was all in vain. Months rolled on. He continued in the same state. It was impossible to discover or conjecture what kept him from Christ. His condition filled me with solicitude; but I studied it in vain.

I made inquiries about him among his friends and neighbors to learn, if possible, his whole disposition and his character of mind. But I soon discovered, as I thought, that I knew him better than any body else.

More than six months after he began to give his prayerful attention to his salvation, as I was riding towards his house, just at a turn in the road, where it wound round a hill, which hindered our seeing each other till we were close together, I suddenly met him. He was riding in his one-horse wagon towards the village. I stopped my horse to speak to him, and I thought he appeared disposed to pass on. But as the road was narrow, and I had stopped my carriage, the wheels of our vehicles almost touched each other, and he could not well get by. We had a long conversation as we sat in our carriages, in that retired and romantic spot. But I discerned no change in his religious feelings. He was as determined, but as hopeless as ever.

At length my eye happened to rest on a brown jug, which would contain about two gallons, and which was lying on its side, under the seat of his wagon. The thought came into my mind that he might be accustomed to stimulating drinks, and that that might be an injury and a hindrance to him in his religious endeavors. I had never heard or suspected that he was an intemperate man. Probably the idea never would have occurred to me that strong drink might be his hindrance, had I not been utterly unable to account for his stationary condition in respect to religion. I instantly resolved to speak to him on that subject. But it was an awkward business. I did not know how to begin. I would not insult him, and I did not wish to injure his feelings. He was an old man, near sixty—old enough to be my father. And to suggest the idea that he might be guilty of any excess, would seem to be cruel and uncalled for. But I thought it my duty to make some inquiry. So I began:

"Mr. E., where are you going this morning?"  
"I am going to the village—to the store."  
"I see you have got a jug there, under your seat; what are you going to do with that?"

He cast his eye down upon it, a little confused, for an instant, as I thought; but he immediately replied:—

"I am going to get some rum in it?"  
"Are you accustomed to drink rum?"  
"I never drink any to hurt me."  
"You never drink any to do you any good?"

"I have thought it did, sometimes. I don't drink much."

"Do you drink every day?"

"No, not every day, commonly. We had none to use in the field, this year, in all our haying, till we came to the wet meadow; when the boys said we should get the fever, if we worked with our feet wet, and had nothing to drink."

"So you have used it, since that time. You carry it into the field, I suppose?"

"Yes; we commonly do, in haying and harvest."

"Well; at other times of the year, do you keep it on hand, in your house?"

"Yes; I always keep it. But it is only a little that I drink; sometimes a glass of bitters, in the morning—or, when I am not well, and feel that I need something."

"Mr. E., when you are perplexed, annoyed, or in some trouble, do you never take a drink, on that account?"

"I am very apt to. It seems to keep me up."

"Well, now, just tell me: for a good many months back, since you have been troubled on the subject of religion, have you been accustomed to resort to it, to keep you up?"

"Yes; at times. I feel the need of it."

"In my opinion, that is the worst thing, my dear friend, that you could do!"

"Why, I only drink a little, at home. I have not carried it into the field, except in haying time."

"So I understand it. But one question more: Have you not often, at home, when you have felt down-cast in mind, on account of sin, taken a drink, because you felt thus troubled?"

"I believe I have done it some times. I cannot tell how often. I never thought much about it." I had become convinced by this time, that he was, at least, in danger; and that it was not at all an improbable thing, that his drinking just kept him from repentance. I told him so; and then began, with all my sagacity and power of persuasion, to induce him to quit all intoxicating drinks forever. At first, he

appeared not to believe me at all. He heard me, just as if he had made up his mind, and did not care what I said. His eyes wandered carelessly around, over the fields and trees, and then turned upon his old horse, as if he was impatient to start on, and get out of the way of a lecture which he disbelieved.

After a time, however, and while I was stating to him some facts within my own knowledge, to show the uselessness of strong drink, he became apparently interested in what I was saying. He listened, and I went on with my plea. As I explained the effect of intoxicating drink upon the mind, and upon the feeling and the conscience of men, he hung down his head, and appeared to be lost in thought. After a while, as I kept talking, he cast a glance at his jug; then looked up; and then his eyes fell back upon his jug again. I kept reasoning with him; but he did not look at me any longer,—he did not appear to be thinking of what I was saying. He appeared rather to be engaged in deep thought; and his eye often turned upon his jug. By-and-by he slowly reached down his hand, and took hold of it. With a very solemn countenance, and without saying a word,—(he had not spoken for half an hour)—he placed the brown jug upon his knee. I talked on, watching his silent motions. He turned his head very deliberately around, one way and the other, as if he were looking for something; his eyes glancing here and there, as if he did not see what he desired. I kept on talking to him.

Just at the spot where we were, the road swept politely round a large huge stone, or side of a rock, which rose about ten feet above the path; and as those who built the road could not get it out of the way, the path made rather a short turn round it. This rock was within three feet of his wagon. His eye fixed upon it, and then glanced back to the jug upon his knee. Then he looked at the rock, and then at his jug again, and then at me.—

And thus his eye continued to wander from one to another of these three objects, as if it could not get beyond them. At first, I was in some doubt which of the three was the most attractive to his eye,—the rock, the brown jug, or myself. But in a little time I noticed that his eye rested on the brown jug longer than on me. At length I was lost sight of altogether, (though I continued talking to him,) and his eye glanced backwards and forwards, from the brown jug to the rock, and from the rock to the brown jug. All this time he maintained an unbroken silence, and I kept on with my lecture.

Finally he seized the poor jug by its side, wrapping the long fingers of his right hand half round it, and slowly rising from his seat, he stretched up his tall frame to its full length, and lifting the brown jug aloft, as high as his arm could reach, he hurled it, with all his might, against the rock, dashing it into a thousand pieces.—

"Whoa! whoa! whoa!" (said he to the old.) "Hold on here. Whoa! whoa! Turn about here. Whoa! We will go home now." The horse had suddenly started forwards, frightened at the platter of the brown jug, and the pieces which bounded back against his legs and side.

The start was very sudden; and as my long friend was standing up, it came near to pitch his tall figure out of the wagon backwards. However, he did not fall.—

As he cried "whoa! whoa!" he put back his long arm upon the side of the wagon, and saved himself. He soon stopped his old horse; and deliberately turning him round in the street, till he got him headed towards home, he put on the whip, and without saying a word to me, or even casting a parting look, he drove off like Jehu. I drove on after him as fast I could; but I could not catch him. He flew over the road. And when I past his house, about a mile from the jug-rock, he was stripping off the harness, in a great hurry. We exchanged a parting bow, as I drove by; and I never spoke to him about rum afterwards. Within a single month from this time, that man became, as he believed, a child of God. His gloom and fears were gone; and he had peace by faith in Jesus Christ.

About a month afterwards, as I passed the spot, where such a catastrophe came upon the jug, and where my long friend came so near to be toppled out of his wagon; I noticed that some one had gathered up some pieces of the unfortunate brown jug, and placed them high up, on a shoulder of the rock. I saw them lying there many times afterwards; and thought that my friend had probably placed them there, as an affecting memorial.

He might have done a worse thing.

From the Soil of the South.

THE SCIENCE OF AGRICULTURE.

We have said that agriculture has become a science. That we are right in this, all men of intelligence will admit; although, no doubt, many of our old farmers would shrug their shoulders at the idea of sending their sons to school to learn how to manage their farm! However, they should not think strange of this.—Instead of being a routine of drudgery, as in ages past, farming is becoming a most delightful profession, and has already enlisted in its ranks the first intellects of the world. The day has come when the scientific farmer takes a high rank in the world of intellect.

Some of our readers, we presume, will pooh at these book farmers, and ask in what these scientific principles of farming consist? What these wonderful discoveries are?

But a few reflections ought to do away with all surprise upon this subject. Let the old-fashioned farmer ask himself why it is that some pieces of land will produce a better crop of oats, corn or wheat than others. Or why is it that kernel of corn placed in the ground will spring up, grow to a great height, and produce a large bulk of the same material? From what are the large stalks, leaves and ears of corn produced? How can the farmer answer this question? No one substance exists in the ground to spring up mysteriously in this way. The most slight observer is forced to say that the stock and grain is taken from the atmosphere, and drawn from the water and gases in the earth by the roots which extend themselves in every direction from the grain planted. The water so taken up by the roots is charged with mineral and vegetable substances, and by a process similar to that by which nature changes food taken into the stomach into flesh, they are converted into the growing plant.

To learn exactly what these materials taken up by the roots and grain are, is the first step in agricultural science; and if this can be found out, is there a farmer in the world who would hesitate to say that the discovery would be of the highest importance? By finding this out he would at once see that he would have a guide in selecting the soils and preparing them for any required crop. Soils vary. All are not formed of the same materials.—Neither are grains all composed of the same principles in the same proportions. The soil that will nourish one kind, will not sustain another.

The chemist is able to separate all the parts of a plant, and tell us of what they are composed. This has been done repeatedly. The corn plant, of which we have been speaking, is found to be composed of the following materials, viz: when green and growing, about 89 or 90 parts in a hundred of water; of carbonic acid; silica or flint; sulphuric acid; phosphoric acid; lime; magnesia; potash; soda, and chlorine, the principal substances of all plants. The proportions of the above substances, saving water, are not given, as the allusion to the composition plants is only made to show of what they are formed. Perhaps it is well to say that the substances most abounding in the green stalk, after separating the water, are silica, phosphoric acid and soda. Potash abounds in the blade; but is far more abundant in the ripened kernel. Consequently it is seen that ashes are a good manure for this plant, and the experience of farmers has confirmed the indications of chemical analysis.

The foregoing observations lead to important inquiries and considerations. The substances which form a blade of grass, or a vegetable plant, are all conveyed to them through the medium of gases and water. The mineral parts are of course dissolved by the water flowing through the soil, and arrested by the roots of the plant, and thus converted into vegetation. Thus we see, why, in order to be productive, the water must have a free circulation through the soil; as when it is otherwise, the mineral substances are not so easily dissolved and circulated, and the air is excluded, leaving the land wet with cold and sour. And here we see that drainage is another confirmation of the indications of chemical analysis.

We propose here to state another indication of chemical analysis, which has been sustained by experience of farmers, although the course indicated is, plowing. The idea is, that by putting the plow down deep, more soil and mineral substances are brought to the surface, exposed to the atmosphere and water, and thus decomposed and rendered nutriment for plants. Deep plowing is called for by the principles of agricultural science, and is sustained by well tested experiments.—There can be no question, other things being equal, but that one acre of soil, twelve inches deep. Try it farmers; plow deeper and a little less of it, and if you do not find the practice here advised to your profit, you will not be likely to find it greatly to your loss.

From the Southern Cultivator.

PLOW DEEP AND PLANT SHALLOW.

MR. EDITOR: In looking about me this year, I have noticed a great number of farmers in this part of the country breaking up their lands about ten inches deep, and planting their corn nearly as deep—as is the old adage with us, "Plow deep and plant deep—but plant deep anyhow." Now, sir, do you not know that this is a mistake? If you don't, I do know that it is as broad a mistake as was ever made by intelligent farmers, because I have tried it and I know it by experience. My rule is to plow deep, and plant shallow, (contrary to the recommendation of several "Agricultural papers") and I will give you my reason for so doing. I plow deep (subsoil from fifteen to twenty inches) so as to get as much clay on top as possible, which will, through a chemical process, turn to soil; and to turn the soil under the clay, in which I intend for the roots of corn to grow. I have the rows in

which I intend planting run off about four inches deep; by this means I secure the richest soil for my corn to take root in; and by plowing deep and planting shallow, I have a deep, loose soil, and will always secure moisture to the roots of corn. The question might be asked: Why is it that he don't plant his corn deep? It is this: suppose I break my land fifteen inches deep and plant my corn twelve? I would only have three inches of loose dirt for my corn to grow in, and more than probable that would be clay, while the roots of corn would have little or no advantage from the soil. It must be to all, that will look at the reason of the case, very obvious. I would ask some of your readers that have their doubts about this (if they question it at all) to try the experiment next year, and inform you of the result. Wishing you great success with your paper, I remain,

TRUTH.

Effects of Ploughing in Green Crops as Compared with Feeding them.—It is yet a common notion that herbivorous animals have some distinct and peculiar mode of action upon the various constituents of their food, by which those parts expelled as excreta are rendered more fit for the food of plants than could be the original food, rotted or decomposed in any other way. It is also ordinarily received that the deposit of a number of animals fed upon an acre of any green crop will be more beneficial to the land than an acre of the same crop plowed in and properly decomposed in the land.

For some years past, I have endeavored to combat these opinions, but as they are still retained in some quarters, I intend in this letter to repeat my arguments, and to give instances where practice has proved the truth of theoretical deductions. I shall not here argue as to the amount of profit and loss attached to the mode of proceeding, as that always depends upon circumstances of which the farmer is the best judge. Nor shall I attempt to prove that, under all possible circumstances, to plough in a green crop will give a greater produce than to feed it off. For in case of exceedingly light lands, the mechanical action of the treading of the feet of the sheep, however, is, that under general circumstances, in ordinary soils, the ploughing in of any green crop, and its subsequent decomposition in the soil, will give more manure to that soil than if the crop had been off; and that the effect of this great amount of manure will be seen in the subsequent crops. The arguments in proof may be stated as follows:

Firstly: It is well established that animals in breathing give back more to the air than they derive from it. They receive nitrogen and oxygen, and return them again, plus a certain excess of nitrogen, carbonic acid and aqueous vapor. Animals also transmit to the air much insensible and sensible perspiration.

Secondly: The experiments of Bousingnaul and others have shown that the liquid and solid excrements of animals weigh much less than the food from which they have been derived, and that as regards the food, excreta are deficient in nitrogen, carbon and hydrogen.

Thirdly: It is well known that animals consume a considerable portion of the farinaceous and oleaginous portions of their food for the production of animal heat, and the greater portion of the excess is laid up in the form of fat; part of the nitrogenous portion is consumed by the voluntary and involuntary motions of the muscles, and part forms fresh flesh for the growing animal. Of the inorganic matters of the food, a portion is required for the formation of bone. It is, therefore, quite clear that there must be less manuring matter in the excrements than in the food, of which they are merely the unconsumed remains—the ashes.

Fourthly: It is known that animal and vegetable substances are composed of the same original elements; that all particles have had vegetable life that though the proximate changes and combinations of their elements are most innumerable, yet that the results of the ultimate decomposition of animal and vegetable matter in contact with air are the same.

Fifthly: To sum up; if, as it has been proved, the excreta of animals weigh less than the food they have eaten; if there is a diminution of the most valuable of the ingredients in passing the animal; and if in their ultimate decomposition, the food and excreta give the same products, it follows that the products of the decomposition of the original food will be greater in quantity and richest in quality; but practical experiments are, in this instance, so easily made, that I should be wrong if I omitted to mention some of the numerous facts which experimentally prove the truth of my assertions. Mr. W. Trumper, Mr. Oakley, and others, have forwarded me the results of trials made on their respective farms. Mr. Trumper, in a field of rape part fed off by sheep, and the other ploughed in, found in the succeeding wheat crop a difference of a quarter per acre in favor of ploughing in.—Mark Lane Express.

Errors in Composing Farm Manures.—The farmer's manure heap is usually the receptacle for every substance that has served its original purpose; but it is a mistaken idea that everything thrown in there will serve a useful purpose. We may, however, just say here that this error has considerably influenced farm practice. Belief in the alchemy, rather than the chemistry of the farm-yard, has led some persons to cart soil into the manure yard, and to carry it back again with the dung to the very field from which it was taken; adding materially to the bulk and expense of the manuring. They presumed that they added to its value, but the effect of the earth upon the farm yard manure would be merely to retain decomposition, and thus might be a loss or a gain, according to the circumstances of the soil and the crop.

Animal substance, of all, and fish of every description, are also very unprofitably applied to farm-yard manure. The natural tendency of animal substances to enter into putrefactive fermentation is well known to be greater than that of vegetable substances. By placing them

in the manure heap, we, in a farther degree, facilitate the quality in which they naturally excel, and the tendency of which is to rob them of their most valuable element, nitrogen. A judicious practice should avoid this error, by depositing, if possible, a system having an opposite effect.

Lime is one of the substances which it is also an error to use with composts in which we have farm yard manure. It is equally an error to mix lime with any compound rich in ammonia. The tendency of lime, in all composts, is to promote decomposition and to waste nitrogen, which escapes by union with hydrogen under the form of ammonia, which is the very treasure of the dung heap, and of most other manuring substances.—Morton's Practical Agriculture.

How Manufactures tend to Increase the Products of Agricultural Labor.—We invite to the following paper the attention of our agricultural readers, and beg at the same time to remark that the consumption of iron for the preparation of machinery for the production, conversion or transportation of the products of the earth is now less by about two hundred thousand tons than it was four years since, although the population has increased in that time less than three millions.—Plough, Loam, and Anvil.

"I was pleased to find here cheap steam engine on wheels (four-horse, costing \$225, all appliances included), from the manufacturing of Huard & Bradford, Watertown, Jefferson county. I visited and spoke of their works some fifteen months since, and I learned to-day that they have been unable to fill their orders promptly at any time during the past year, owing to the continually increasing demand, although they have in the meantime quadrupled the number of their workmen. They make engines, with boiler, &c., as low as \$275, (half horse), requiring about as much fuel as a prior engine, and from that up to six-horse, (\$400.) The one here exhibited can be guided to the horse stack to thresh out and winnow the grain, and when that is done will propel itself in the field in quest of a job of stump pulling; thence will travel back to the house, and there saw up the winter's wood about as fast as a man can load it along, beguiling its leisure moments by pumping water for the cattle, churning, turning griststone, hanging the brass kettle over the kitchen fire and rocking the cradle. Of course I speak only of the power; to apply it to all of these various uses, other machinery is requisite. But I have seen enough to convince me that for all purposes where essentially stationary power will answer, steam is already cheaper for the farmer on a liberal scale than horse power, and that it is a shameful waste of human labor to cut up a pile of wood with an axe. For ploughing, transportation, and such essentially locomotive uses, I think cattle must still be employed until the time (which cannot now be many years ahead) when the steam engine shall be superseded by some agency or motive force which does not so rapidly exhaust or consume the material or elements of its power."

Hominy.—We have never any grains of allowance for the host or hostess, in this enlightened day, who will spread for his or her guests a supper, but more especially a breakfast, without a smoking dish of well prepared and well boiled hominy, (or grits, if you'll so call it), made from pure white or flint corn. For many you'll plead ignorance and say that the Reviewer never told how to make his favorite dish; here is the modus: After shelling your corn, winnow and clean it of all dirt and trash, for we eat more of it in corn bread than all our food besides; then soak your grain for ten minutes or longer in clear boiling water, let it drain, then grind in a steel mill, and spread immediately upon a clean cloth and upon a table, in the sun; after drying, winnow it thoroughly of the bran, which slips from the grain in grinding, (the same in pounding by being soaked in boiling water.) Hominy, before it is boiled, should always be soaked for a few hours over night for example, and then cooked as quick as possible. We esteem good hominy one of the greatest luxuries in life, a dish that foreigners may covet, and used as a standing dish, we regard it as the best proof of an intelligent house-keeper.

It cannot fail to have been noticed by the public, that the Democratic prints, and letter writers, have lately been speaking of Mr. Clay in terms, and in a spirit, such as we have never before heard from them in relation to his distinguished man. They are uttering the deepest regrets, that his mortal career is threatened to be closed before long; and they beseech upon the sick lion a meed of praise and approval, not so high indeed as his noble qualities entitle him to, but such as that party has suffered to escape them till lately.

We have no doubt, that this admiration and regret are sincere. We have as little doubt, that the admiration, even higher than they now choose to utter, has always been felt by them. What a contrast does the tone of their press, and the language of their party, now present to that we constantly heard from them in all time past! Every body remembers the bitterness of spirit, the rancor of party malignity, the violence of denunciation, with which these sympathizers and admirers of the great patriot and statesman used to assail him; how they tasked their invention, and stricken at our misrepresentation, to blacken that name which belongs so illustriously to our national fame.—How they accomplished by it a temporary success, the country well knows, and we fear will long have cause to lament.

Their present admiration of his exalted character is a striking commentary, by themselves, on their previous course. How much of rancor, of principle, of morality, or of patriotism can belong to those who, for the mere purposes of party, and with a shameless disregard of the high interests of the country, pursued almost to the death, "the foremost man of all the world?" And if Mr. Clay could be now looked to as a man practically in their way, would they suffer a word of approval to escape them? Would not again the whole party back be turned loose, to worry, and to bay, and it possible to pull down, the noble lion, over whose body now apparently stricken down, by disease and age, they pour forth a share at least of his home due to his high qualities?

We devoutly trust, however, that Providence in its mercy to our country, will yet spare to us for a while, the sagacity, the statesmanship, and the lofty patriotism of this first of our men. There is some reason to apprehend, that efforts may be made to entangle and embarrass our country in a foreign policy, from whose ruinous consequences his high talents, practical wisdom, and weight of character may largely contribute to save us.—Richmond Whig.

Hunger never saw bad bread.