crown of glory; to deny his own flesh, to mock at his fellow, sprung from the dust to which both will soon return?"

Temperance.

Results of Washingtonianism.

During the fervor of the Washingtonian movement, no one could tell whereunto it would grow. We have now seen its course; its results are apparent; its faults and peculiar excellences are alike distinguishable. Without endorsing everything that this movement comprehended, we think it, upon the whole, one of the most remarkable events of our age.

There is no marvel in the mere reformation of bad men. The world is full of examples where the moving force originated from without and was steadily applied to them. Nor is it remarkable that rude men should act powerfully in their own behalf when the evil was of the nature of injustice or some outward grievance. But it was neither of these things that happened. The actors in this revolution were for the most part rude and ignorant, to be sure; but mere ignorance was a virtue in comparison with the characteristic evils which they suffered. Their oppressions were mental. The most depraved conditions of mind co-existed with the morbid states of body. A drunkard is a creature slowly undergoing the process of dissolution; or rather it is a process of slow combustion. Soul and body are burning away together. That such men might be healed, as other patients are, by suitable hospital-practice we knew. But that they should develope in their own midst a recuperative movement; that one of the most beneficial reforms of any age should have its birth among brutal sots; that they should glow with a strong enthusiasm; that they should spread the generous infection through the whole nation; that the direction of their impulse should be upward toward morality and religion; that it should continue so long and bring forth such large results directly and collaterally; this is a matter of great wonder to us.

When, before, has the world seen a band of thousands of men, scattered through a nation as large as ours, without a bond of coherence except the common wretchedness of a common degradation, moved by one great impulse toward self-redemption and the redemption of others? When they stood up in their strange and motley meetings, drunkards pleading with drunkards, their faces, down which their tears flowed, were yet blotched by dissipation; their faltering tongue almost refused to tell their dreadful story. Their hands could hardly sign the pledge for trembling. That such men should have glowed with an intense enthusiasm for a high moral end, even for an hour, or in one city, is enough wonderful.—That they have lived on for years; that they have given rise to new questions for the age; that they have changed essentially our notions upon the temperance movement; that they have in every city in the land given back to life and usefulness many who seemed utterly reprobate; that the animating spirit has created and entered into new organizations; all this would seem to be answer enough to those who disparage Washingtonianism.

This movement has ceased as an impulse. It is not possible that an impulse should last. Either it dies out, or it enters into some embodiment, and thus saves itself, while it appears to die out. If any one will take the pains to go among the laboring classes of our towns and cities, and inquire into their organizations, their meetings, their reform tendencies and sympathies now, as compared with ten or fifteen years ago; if he will go with them to their public rooms, or district meetings; above all, if he will take the membership-book of some division of the Sons of Temperance, and read the names and occupations of the hundreds of members, and inquire into the history of these men; what they were, how they became temperance men, and what they are doing; he will be abundantly satisfied that the Washingtonian impulse did not die out, but entered into permanent, instituted forms.

In specifying some of the results of this movement, we do not teach that it originated some of the things which characterized it.—But it appropriated them. It had a quick sympathy for everything that would help a struggling man; and brought into the temperance cause a great many economical and social arrangements before little employed; thus giving breadth of base and permanence to the cause.

1. We may safely say that Temperance never became really *popular with the masses* until the Washingtonian movement brought it home to the sympathy of the great laboring class. Before, it seemed to be invidiously handed down to them by those above. Afterwards, it was a cause of their own. They took the brand from their own hearth-stones with which to enkindle the altars of reformation.

2. It developed, with a certainty never before attained, the fact that there is capacity and hope of reformation in the most desperate men; and that such men are themselves the best instruments of their own restoration.—We knew that a healthful mind must always educate itself; and that all foreign aid was merely a stimulus, arousing the mind to an exertion of its own powers. It is now plain that this is equally true of the worst conditions of unhealthy minds; and that recuperation, as well as education, is the product of the victim's own effort. This should shape every reform movement. It is their appropriate function to awaken men to self-exertion. God works in us to will and to do. He does not do for us: he stimulates us to do for ourselves. The power of inspiring hope and enthusiasm among the fallen, is the essential characteristic of true Reform. Men cannot be governed half so well as they can govern themselves; nor educated so well as they can educate themselves; nor reformed so well as they can reform themselves.

3. It then availed itself of the already existing tendency of laboring men to *associate* for mutual support and counsel. It was the want of this that at first limited or reversed the achievements of Washingtonians. It was the perception of that want that led to the organization of the Sons of Temperance. The two most important and interesting features of that beneficent organization are, the fact that it is an *Institution;* i. e. an arrangement by which temperance influences became permanent rather than impulsive; and the fact that it is a mutual health-insurance company. It assumed these features not upon theory, but under the pressure of necessity. The *want shaped* the relief.

4. It is impossible that the great industrial classes should feel the benefit of self-exertion in one direction without expecting a like benefit in other directions. We think that primary temperance meetings conducted by artizans and labourers, have gone a great way toward inspiring a desire for other self-improvement. And it would be worth while to set forth the present actual spirit of the masses among us in matters of self-improvement. We have been especially interested in observing the measures that have been taken by them for mutual assistance in economical arrangements. Superficial observers are content to cry out against the multiplication of secret societies. A more sagacious philanthrophy would have perceived in the *secresy* a mere accident, with very little in it of good or evil, and would pierce to that which is beneath it—a general tendency of men to come together into classes, sections, societies, divisions and lodges. It would be struck with the fact that in all these forms the main drift is economical and *moral;* that the element of temperance in almost every case is constitutional; that they pursue objects which enter vitally into the prosperity of the laboring man; that they are all of them engaged in taking care of the sick, relieving the suffering, watching over the widow and orphans of deceased members, or, in other words, that they are associations which embody the great gospel principle *of the strong taking care of the weak.*

We are not apt to be enough in sympathy with the classes below us to know their wants, or to criticise the exertions which they make to supply them. The sphere in which they move who find fault with many of the organizations of laboring men is highly stored with social and intellectual influences. Let our censors forget the accumulations of thought and study which make solitude impossible to him; let him leave a circle in which all his companions act upon his mind with suggestive and pleasurable excitement; let his whole commerce of life be with outward and physical things; let his friends be few and principally his transient shop-mates; let him stand in the lot of any one of millions, of day-laborers, journeymen, apprentices, small artizans, who have no family, who are strangers where they reside, who always see and feel the *hard* side of life, who, if sick, soon consume the few dollars laid up for a wet day and are then destitute, and who have none to counsel or care for them except the companions of labor, and he will find some wants developed, with an irresistible force, for which now he can find no sympathy, and on which he speculates just as if every man in society inherited the blessings of that sphere in which he lives, and lives too without appreciating his advantages.

These movements are not local. They are universal. That they have no imperfections we do not say; that they are beset, like all other institutions, with liabilities to evil, we full well know. But, notwithstanding, we have an intense sympathy for and with them as movements in the right direction, and substantially on right principles. We thank God for the augury and take courage.

STEAM PLOUGH.

What next! Here comes the steam plough, puffing, snorting, turning up its fifty acres per day, driving the terrified teams of oxen, mules and horses from the field, and performing their work better, and a thousand times more rapidly than they themselves could do it.—"Well," says farmer Giddens, "I shouldn't like to hold that plough?" "Neither should I father," exclaims his son, "like to ride that horse to plough among our corn? If I should strike a rock, O how the fire and smoke would fly! and what would become of me?—*What next?* Truly the invention of to-morrow must answer.

New River, La., Aug. 2, 1849

Dear Sir:—I had some correspondence with you, some time since, about the advantages of a steam plough in this level country, and I now am happy to inform you that we are about to have one in operation in a few weeks, invented by Mr. Henry Cowing, and I believe patented. It is, I think, to be called the "Steam Plough, Land Locomotive, and Machine of all Work;" and not an inappropriate name, either. It is to extract stumps, cut ditches, break up land (fiifty acres a day,) lay off the ground, plant, cultivate, lay by, cut and haul to mill the cane. I have seen a model, and it will answer, if sufficient power can be obtained without too much weight. Imagine to yourself a velocipede on wheels, sixteen feet high, and eighteen feet apart, with a governing wheel, eight feet high; on the inner rim of the large wheels, a cog wheel; on a platform built on the axle of the large wheels, and supported by the governing wheel, a locomotive; across the platform, a shaft with a pinion wheel on each end, working in the cog wheels, and worked by the locomotive; and you have the machine, as simple as may be. The inventor thinks he gains power without loosing speed by this arrangement of the machinery. If so, the thing is done. There will be three frames for ploughs, each to contain five ploughs, attached by iron rods to the axletree of the large wheels. The breaking up of ploughs will be so arranged as to follow each other, cutting only six inches with one plough, but yet cutting in all twenty-four inches deep. In this way the ground will be much more thoroughly pulverized than if a furrow slice, twenty-four inches thick, was cut with one plough. When you get to the end of the field, by a very simple arrangement, the ploughs will upset, eight or ten feet off the ground, and by throwing one wheel out of gear, and going ahead on the other, the machine will turn short round, the plough passing over the top of the fence. On a smooth, firm road, it will travel at the rate of twenty-five miles an hour. But as your friend of the Union says, "*nous verrons.*"

Respectfully, W. J. Minor.

To J. S. Skinner, Esq., "*Editor of The Plough, the Loom, and the Anvil.*"

Heat expands bodies.

This is a universal law, and there are but one or two apparent exceptions. Were there no such thing as heat, liquids and gasses could not exist; all matter would be solid. Heat is the cause of bodies becoming fluid; it insinuates itself between the particles of which they are composed, and forces them further apart; if a great degree of heat is applied, the particles are separated so far that they then assume the form of gas. Steam is a familiar example; and the thermometer acts solely on this principle. There are only two or three exceptions to this law, and they are only so in appearance. The principal one is water, which, instead of contracting when cooled down below 32 degrees, expands, when it assumes the form of ice. This is a beautiful provision, since the ice, floating on the water, prevents it parting readily with its heat and thus does not allow our rivers, &c., to become a solid mass of ice, as they otherwise would. The cause of the water expanding, and becoming lighter, when it freezes, is because the crystals of ice have insterstices, between them, which were filled with air.

Markets in London.

The number of oxen consnmed in London yearly is estimated at about two hundred and fifty thousand; of sheep about one million, of lambs about four hundred thousand, of calves three hundred thousand, of pigs about a quarter of a million, besides various other animals used as food. Considerable quantities of butchers' meat have lately been imported from Scotland and the provinces to London, in addition to what is bought at Smithfield and the other markets. It is reckoned that about one million of pounds sterling per annum is a fair computation of the value of live animals sold in Smithfield market alone. About eight hundred thousand gallons of milk are consumed in London annually, supplied by about ten thousand cows. It is said that nearly five hundred thousand pounds per annum are paid by milk retailers to cowkeepers for the produce of their cows, and that from the additional cent. per cent. added to the original cost of the produce, independent of the loss caused by adulteration, the citizens of London pay nearly one million sterling for milk alone. Upwards of ten thousand acres of land are under cultivation around the city, in order to supply the regular vegetable market; and about four thousand acres are devoted to the cultivation of fruits and flowers. Nearly seven hundred thousand pounds sterling are paid at market for garden stuffs, and upwards of 400 thousand pounds for fruita lone; and when we take into consideration that the retailers advance the price of these more than two hundred per cent., we shall find that the Londoners disburse about three millions of pounds yearly for esculent vegetables. The annual consumption of wheat in London is about one million quarters, each quarter containing eight Winchester bushels. About one million chaldrons of coals are consumed, each chaldron containing thirty-six bushels, or one ton and a half. Nearly two hundred and fifty thousand barrels of ale and porter annually are brewed and sold in the city, each barrel containing thirty-six gallons. About twelve millions of gallons of spiritous liquors and compounds, about seventy thousand pipes of wine, about three millions of butter, and about thirty millions of pounds weight of cheese constitute the articles of general use. In Billingsgate market alone—that famous theatre of eloquent persons, who, from their dress and demeanour might be supposed to constitute a third sex—upwards of three hundred thousand tons of fish are annually disposed of, and nearly one hundred thousand pounds are paid for poultry during a season by the rich.—*Hogg's Weekly instructor.*

Oriental Cooking.

The following from Lynch's Narrative, will give us an idea of something to be grateful for, viz., the blessings of civilization:—"We were amused recently at witnessing an Arab kitchen in full operation. The burning embers of a watchfire were scraped aside, and the heated ground scooped in a hollow to the depth of six or eight inches, and about two feet in diameter. Within this hole was laid, with scrupulous exactness of fit and accommodation to its concave surface, a mass of half-kneaded dough made of flour and water. The coals were again raked over it, and the fire replenished. A huge pot of rice was then placed upon the fire, into which, from time to time, a quantity of liquid butter was poured and the compound stirred with a stout branch of a tree, not entirely denuded of its leaves. When the mass was sufficiently cooked, the pot was removed from the fire and the coals again withdrawn, and the bread taken from its primitive oven. Besmeared with dirt and ashes, and dotted with cinders, it bore few evidences, of being an article of food. In consistency, as well as in outward appearance, it resembled a long-used blacksmith's apron rounded off at the corners. The dirtiest ash-pan of the southern negro would have been a delicacy compared to it. The whole party gathered round the pot in the open air, and each one tearing off a portion of the leather bread, worked it in a scoop or spoon, and dipping pell mell into the pilau, made a voracious meal, treating their spoons as the Argonauts served their tables, eating them for dessert. With a wash in the Jordan they were immediately after ready for sleep, and in half an hour were as motionless as the heaps of baggage around them.