NEW YORK, MAY 12, 1849.

A Characteristic of the Age.

When we look abroad upon the world and scan its most striking features and compare them with the features of the days gone by, we cannot fail to perceive that there is one trait at least which eminently characterises and distinguishes the present from all others that have preceded it; we refer to the spirit of rapidity in locomotion. It was the boast of Cæsar that his legions in one season had conquered in Asia and Europe, but in the same space of time which Cæsar's legions took to come from Rome to Albion's coast, an army could now be transported from the Thames to the Indus, or across the wide Atlantic—that ocean which to the ancients was a vast unknown.—History records with pride the feats of swiftness performed by their sure footed "steeds of metal true," but what is the speed of the swiftest animal in animated nature, in comparison with the swift winged messenger that travels along the copper wire of the Telegraph, or the disc-footed courser that pants unwearied on his iron girdled course from Lake to Ocean. Last year our country was thrilled by a famous horse on Long Island trotting 100 miles in 10 hours, and 15 years ago Mr. Osbaldistone in England, astonished the world by riding 200 miles in 10 hours by relays of famous racers; but what are all these feats in comparison with the feats of a few iron wheels driven with expanded water? The crippled soldier whose luckless limbs were left on some well fought field, can by the aid of science travel as quietly as if setting at his own fireside from Albany to Buffalo, during the time the swiftest footed racer could gallop one fourth of the distance. We may boast of "the speed of the Arab steed," and we may admire the eagle in his flight through the air, out neither the race of the one, nor the flight of the other have so much poetic inspiration in them, as the locomotive that fleets faster that the whirlwind or the steamship that marches proudly against wind and wave over the stormy deep.

Tinning.

The affinity between tin and iron, copper and brass, renders the process of tinning of much importance in the arts. By covering iron with a thin coat of tin its surface is preserved from oxidization. to which it is greatly disposed, and by covering brass and copper with tin, such as kettles, they are preserved from communicating poisonous effects, by the prevention of oxidization, owing to the coat of tin. The art of tinning plates is one for which England is at present more highly distinguished than any other nation. This art, however, was not practised in England previous to 1725, and it was derived from the Germans.

The process as at present pursued in England is somewhat different from the old process, and as it is much better, we will, as is our wont, compress as much knowledge as we can on the subject into the smallest possible space. The iron plates to be tinned are made of metal from the common English ore with a large portion of fine *hematite* from Ulverstone in Lancashire, and all are smelted with charcoal. The ore is first reduced to pigs, then to flat bars, and then reduced to plates by heating the bars red hot, and running them between case hardened steel cylinders to reduce the plates to an even surface of equal thinness in the whole sheet. Every inequality must be removed in the fine rolling or the sheets are considered unfit for tinning.—After this the plates are steeped in weak sulphuric acid liquor and then they are taken out and scoured thoroughly with sand and bran, so as to be quite bright to enable the tin to adhere. The tin is melted in deep rectangular crucibles and kept in a molten state by a moderate fire underneath. A quantity of suet is kept floating on the top of the molten tin.—The iron plate is then taken up by one corner with a pair of pincers and dipped vertically into the tin and when withdrawn it is resplendent with the coating of tin which adheres to it. The dipping is repeated three times for what is called single plate and six times for the double plate.

The following process is for tinning without acids and was the subject of a patent in France a few years ago:—

The iron plates are scoured or cleansed in a large wooden vessel containing ten pounds of rye flour to 100 of water which is left to ferment with the plates in it until the scaly portion of the plates has been wholly separated, when they must be perfectly scoured to brightness by sand. When this is done the vessel for tinning is prepared with 80 pounds of fine tin to which is added 12 pounds of beef and 12 pounds of mutton fat, previously melted and poured into the tin which should also be melted. After this an ounce of silver is added and melted and the vessel is then fit to receive the sheets. Before the scoured iron sheets are dipped into the melted tin, they are dipped into a vessel into which is dissolved half an ounce of sal ammoniac for every three pounds of water, and from this lifted quickly and dipped into the cauldron containing the melted tin and fat. The sheets should be dipped vertically and lifted vertically, getting two or three lifts and dips before they are finally taken out. This process produces a coat of tin with a very minute *laminæ* of silver, which makes the tinning very hard and solid and well adapted for exposure to the atmosphere. Small articles, such as tacks, &c. may be tinned in a stoneware vessel, by first cleaning the articles well and then treating them as has been described for the plates only melting the tin in a stoneware vessel over a charcoal fire.

Our Prize Essay.

The Prize Essay on our last page is now completed. It is not long, and therefore embraces as stated the outlines of the reforms deemed necessary for the better protection of Inventors' rights. We have received quite a number of other communications on the same subject. Some of these we will condense, and present in future numbers, especially those from the pen of *Junius Redivivus*.—They are terse and of an attractive nature.

E. Maher, Esq. the author of the Essay, is at present residing in Philadelphia. He is minutely acquainted with the business of the Patent Office, and has talents which might elevate him to some of the most distinguished stations in our country.

In respect to improvements or reforms in our Patent Laws, our own personal attention has been directed lately to the evils and injuries arising from the present mode of contesting patentees' rtghts. The articles of the person referred to above touches this point, as will be seen when published.

Iron Stores.

Five iron stores have been erected on the corner of Murray and Washington streets, this city, by Mr. E. H. Lang. Each store is 20 by 56 feet long, and they have been erected without dirt, bustle, bricks or mortar, the usual attendants of brick houses, which incommode our streets more than any thing we know of. Each story is supported by rows of fluted pilasters, the courses between which are compactly bolted, and the seams of panels completely covered and concealed from the view by an ornamental cornice. Thus the walls are in fact one solid iron block, capable of supporting an immense weight. There are about 150 tons of iron in the buildings. The first row of pillars and panels was cast at the West Point Foundry, the 3d and 5th at the Novelty Works and James's Works, and the 2d and 4th at Burdon's Works in Brooklyn.—The cornice and ornaments were made by W. L. Miller, 40 Eldridge st. The mason work required was done by Messrs. A. & J. White, and the carpenter work by Samuel Martin.—The entire cost is stated to be about $20,000. They have been put up in the course of two months. The only danger apprehended from iron buildings is the expansive nature of the metal. This should be guarded against as well as possible.

Pressure of the Ocean.

Mr. Editor.—It is a common remark with both landsmen and seamen that if a common empty glass bottle be tightly corked, carefully sealed, and then by suitable means lowered to a great depth in the sea, that it will come up partly filled with water, although upon examination the cork and sealing wax are in as perfect a state as they were before being lowered. It is also the opinion of many that the immense pressure which must evidently be experienced at such a great depth forces the water to press through the pores of the glass, and thus to partly fill the bottle. Being in a position to test the truth or falsity of the above remark I took the opportunity of examining the subject and give below the experiments and their results.

A common empty green bottle was carefully corked, sealed and lowered to the depth of about sixty fathoms. Upon hauling it immediately up again the bottle was found to contain about one fourth its capacity of water although the cork and sealing were apparently undisturbed. This experiment proves therefore, plainly, that the above remark is correct and that the water actually forced its way into the bottle. There being a great diversity of opinion at the time by those witnessing the above experiment in regard to the manner in which the water entered the bottle; the following experiment was made expressly to determine that point.

An empty glass tube was carefully closed at both ends by means of a spirit lamp and blow pipe and lowered to the depth of eighty nine fathoms, where it was allowed to remain fifteen minutes by the particular request of those who believed that the water actually forced its way through the glass. Their belief was, however, suddenly changed when the tube was hauled up containing not the least particle of water. The water evidently passed through the cork since the latter experiment proves that the water could not have passed through the glass.

These experiments on the pressure of the ocean were made on account of the difference of opinion of the passengers on board. Indeed I was surprised that such a difference of opinion could exist.

We have been about forty days out and as we have the south-east trades we will be in Rio Janeiro in fifty days or thereabouts, by the 3d of March.

Yours respectfully, S. N.

On board ship Tarolinta, Lat. 3° 55' S.; Long. 28° W. Feb. 22, 1849.

Steam and Water Power.

A water-mill is necessarily located in the country afar from the cities, the markets and magazines of labor, upon which it must be dependent. Water appears to run very cheaply, but it always rents for a pretty high price, and the first cost of dams, races, water-wheels &c., is on the average quite as great as that of a steam engine and equipage, and the annual repairs are, at least, equal. No casualty, entailing unexpected expense, ever need happen to a steam engine; while water mills are always liable to injury or destruction, from floods; and the interruption of work from low water is a continual and very expensive drawback. A man sets down his steam-engine where he pleases—that is, where it is most to his interest to plant it, in the midst of the industry and markets, both for supply and consumption of a great city,—where he is sure of always having hands near him, without loss of time in seeking for them, and where he can buy his raw materials and sell his goods, without adding the expense of a double transportation.

The expense of a steam engine is not much if it is well managed. It should be of sufficient capacity to work all the machinery with ease, without using steam at a high pressure. It should be as carefully attended as a clock—nothing should be suffered to go out of repair from carelessness, and nothing should be wasted from neglect.

Wages in Germany.

Thousands of stocking weavers in Germany—adult men—get only 40 cents a week in the stocking weaving business. The employers add to these wages two slight meals per day.

Hoe's Printing Presses.

A paragraph is going the rounds of the papers to the effect that over $3000 worth of papers are spoiled per annum in the New York Sun establishment, by the use of Hoe's lightning presses, and that therefore they are a disadvantage compared with other printing machines. We venture to assert that there are no other printing presses in the world upon which the immense edition of this paper can be printed, even at one half the speed, which will not spoil a far greater amount of papers that are now lost. Previous to our lightning presses, three of the most approved double cylinder machines were employed, and the number of spoiled sheets was much greater then than now, though our edition at present is much larger.—*New York Sun.*

[We saw the paragraph referred to above in one of our Philadelphia exchanges—the Gazette we think, and we were not a little surprised at it. It was a correspondent's letter. This settles the question.

Huge Casting of a Propeller Wheel.

On the 26th ult. there was cast at the People's Works, Kensington, Philadelphia, a huge Loper propeller wheel 11 feet in diameter for the steamship Carolinian, now building in that city. The whole job was accomplished in less than a month from the commencement of the pattern, and more than two weeks of this time was occupied in drying the mould properly. The metal used was a composition of brass and copper, 16,000 pounds of which was melted in a single cupola in about two hours time, the pouring into the mould being accomplished in *less than a minute.* An examination of the casting has proved that it is perfect in every respect.

Great Pail Factory.

At Niagara Falls, where there is as much water-power as might drive all the machinery in the world, there is a factory for the manufacture of wooden pails, which is believed to be the largest in the world. The factory is owned by Messrs. Patterson and Murray, and is a large four story stone building. They have in operation as much machinery as can turn out 1000 pails per day and about 500 tubs. The factory consumes a million feet of pine logs a year, and band and wire iron in proportion. The machinery is all of the latest and most improved description, and the facility and rapidity with which the pails are now made are in striking contrast with the slow and laborious process of hand manufacture practised a few years since. And the beauty and uniformity of the article are as striking as the celerity with which it is manufactured.

Great Shafts.

The shafts for the engines of the steamship Atlantic, E. K. Collins' Line, have just been completed at the forge of L. B. Ward, foot of 59th street, N. R., and weighs 87,397 pounds. The cranks of the same ship weigh 43,154 pounds, making the weight of shafts and cranks as forged, upwards of 65 tons.

Patents Issued.

In the list of Patents this week is one to Mr. J. Van Kuran for an improved cast iron Railroad Car Wheel. Prof. Morse's patent for his Chemical Telegraph is also issued, and we shall be able to present an engraving and description of Mr. W. M. Haines' Calculating Machine in a few weeks. It is a very simple and durable one.

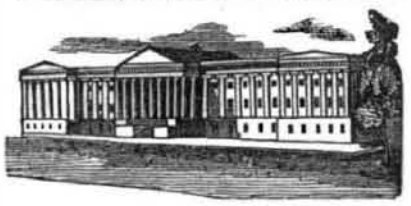
Back Volumes of the Scientific American.

A few more copies of complete sets of vol. 3 of the Scientific American may be had at the office, either bound or in sheets. Price neatly bound $2 75, in sheets suitable for mailing $2. Send in your orders early if you desire them filled for we have but a few more copies left, and the number is growing less every day.

Our London Patrons.

We are happy in being able to inform our English patrons that such arrangements have been completed with the London Patent Office that the Scientific American may hereafter be found there. Messrs. Barlow & Payne are agents at 89 Chancery Lane, and will receive remittances on account of the Scientific American from those who may desire to subscribe.

Terms—3 dollars per year and postage paid out of the United States.



LIST OF PATENTS.

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending May 1, 1849.

To R. H. Emerson, of Portland, Me., for Locomotive with driving axle above the Boiler. Patented May 1, 1849.

To William W. Boggs, of Southborough, Mass., for improvement in Ships' Cabins. Patented May 1, 1849.

To William M. Haines, Rochester, N. Y., for improvement in Calculating Machines.—Patented May 1, 1849.

To W. M. Shaw and Ezra Gould, of Newark, N. J. for improvement in Printing Paper Hangings. Patented May 1, 1849.

To Abijah Smith, of New York City, for improvement in Trusses. Patented May 1, 1849.

To Henry Lawrence, of Philadelphia, Pa., for improvement in Artificial Teeth. Patented May 1, 1849.

To Edwin Allen, of Windham, Conn. for improvement in Education Tables. Patented May 1, 1849.

To W. H. Jennison, of New York City, for Self-adjusting Filtering Diaphragms. Patented May 1, 1849.

To Livingston, Roggin & Adams of Pittsburgh, Pa. for improved right or left hand Lock. Patented May 1, 1849.

To Lewis Jennings of New York City, for improved Gold Washer. Patented May 1, 1849.

To J. A. Gridley of Southampton, Mass. for improvement in Churn Dashers. Patented May 1, 1849.

To Hodgman & Wyckoff, of New York City, for improvement in Machinery for making Mats, &c. Patented May 1, 1849.

To William, Mix, of Prospect, Conn, for improved method of making wire strengthened spoons. Patented May 1, 1849.

To T. R. Scowden of Cincinnati, O. for improvement in valve seats, &c., for Water Maines. Patented May 1, 1849.

To Isaac Van Kuran of Rochester, N. Y. for improvement in Cast Iron Car wheels. Patented May 1, 1849.

To Augustus Clark, of New York City, for improvement in Easy Chairs. Patented May 1, 1849.

To J. N. Bolles & H. G. Knight, of Providence, R. I. for improved method of turning the drill in rock drilling machines. Patented May 1, 1849.

To John Fowler, of New York City assignee of Henry Jones, Bristol, England, for improvement in the preparation of Flour for Bread Making. Patented May 1, 1849.

To Charles Mowry of Elbridge, N. Y. for improvement in Jointing and Cutting Staves. Patented May 1, 1849.

To Samuel F. B. Morse, of Poughkeepsie, N. Y. for improvement in Electric Telegraphs. Patented May 1, 1849.

RE-ISSUE.

To John Thomas, of Elizabethtown, N. J. for improvement in Floating Dry Docks. Patented December 20, 1837. Re-issued May 1, 1849.

To Charles F. Tuttle, of Williamsburg N. Y. for improvement in Hot-air Registers. Patented Jan 23, 1849. Re-issued May 1, 1849.

National Importance of Health.

Health and strength are a nation's best possession in peace, and her surest defence in war. In both, the power of making great, rapid, and continuous efforts is, at least, as important as the possession of ingenious machines and powerful artillery; and the time, perhaps, is not far distant when the cost of provisions and mechanical skill and dexterity shall be so nearly equalised, that superiority shall mainly turn on the strength and power of endurance of the mechanic and soldier; and that nation which has best husbanded its living resources shall be most prosperous in peace, and most certainly successful in war.

Correspondence of the Sci. American.

PANAMA, March 24, 1849.

MESSRS. MUNN & Co.

GENTLEMEN.—I promised when I left you to communicate such facts as I might deem interesting to the many readers of your valuable journal. Our company arrived here safe, after having experienced an indescribable amount of sea sickness, so much so, that we had no choice between life and death, except that perhaps the latter would have been a welcome messenger of relief from the horrible feelings that are consequent upon this dreadful sickness. Well, "here we are," and yesterday I supposed we might remain for a month to come, but our nerves were quieted in a great measure by the unexpected arrival of a vessel from San Francisco.

Of all the abominable trips a man can make commend me to the one from Chagres to Panama. A concise and innumerable quantity of mud holes with the small cavities at the bottom filled with small rocks so admirably rounded, that a juggler would find it difficult to keep on top of them, then imagine miniature precipices and precipitous steeps with an occasional attempt at level ground that always proves a failure, and then on top of all that, place a beautiful, soft, slippery loam, and you have *my* idea of the road from Gorgona, to Panama. In connection with all this we have swarms of musquitoes, ants, flies, and other interesting specimens of "American vermin" and you may well suppose that a lazy man will gain great credit for his industry in contending against these antagonists. The mules (the Lord forgive me for even such a *partial* libel upon flesh as is included in the erection of these animals) are lazy, weak and puny things, but one great virtue however is their sure footedness—if they cannot get along they are sure to lie down. I bought a noble beast at Gorgona about 5 feet by 3, and nearly all head like a tadpole, paying for the beauty (or the beast) $10. He brought over the road nearly 100 lbs. and fainted on the way; having no *sal-volatile* on hand we were obliged to wait patiently until he came to us of his own accord.

The return trip, with no ballast to steady him was altogether too much for his energies and he laid himself down on the road side, there to die, "not a drum was heard, not a funeral note" reads the burial of Sir John Moore, for the requiem of poor Plug. We all accomplished a feat of pedestrianism unsurpassed by Gildersleeve in his palmiest days,—and slept as soundly as a good man with a quiet conscience. Twenty four miles of such a road is no fool's job, *though it may be often walked by such*. It is almost impossible for me to describe Panama on account of the difficulty in drawing a proper comparison.

I should say that if you took about 300 "Pennsylvania Stone Barns" with balconies, and cut off the cupalo's without adding chimneys. and then enclose them by a stone wall, putting them as far apart as you pleased, you would get a very correct idea of this place.

The people too are very singular, instead of carrying baskets and cans of water in their hands they put them on their heads, thrusting both hands into their pockets trudge along perfectly independent, and if they wish to pass a Sunday in an agreeable and *Christian* like manner they go to church in the morning, worship devoutly, and attend a *quiet social* sort of a cock fight after dinner, a practice not uncommon here. They have also their *fandangos*, another agreeable method of passing away the small hours. We are all pleasantly situated here, having six rooms for twelve of us and living *very high*,—in the third story. Our fare is *very unfair* in price and quality—the best bread we have is a sea hiscuit, which is worth *only* 20 cents per pound, but the last lot we purchased they threw in the mould, and expectant worms, rightly premising I suppose that if we eventually must become food for them, we had better anticipate their attack by making them food for us. We have engaged a man to go to California with us, a Dutchman who is a sort of nautical admirable personage, and does every thing required of him but fight,—this part of the business we have contracted for, and shall not let out the job.

We board ourselves and do our own washing,—the latter is generally taken by the natives, but as they are in the habit of *taking in* those who hire it done at the rate of two or three dollars per dozen, we prefer not to patronize them.

Being among Spaniards, I am picking up a little Spanish but do not succeed well. Water in Spanish is *agua*; what brandy is I don't know but have seen some Americans who can tell, I am confident.

I wish you could see the soldiers here; unlike the old saying they are easier described than imagined, because there is so little to describe, Barefooted and with no superfluity of clothing, they roam where the "darkies are seen, sucking the juice of the sugar cane green."

I think a good smart American could whip about six at sun rise, and after a slight repast finish Company A, before night, and thus go through the regiment in 10 days. I merely offer my own opinion, without wishing to engage in the experiment. It costs very high to cross the Isthmus, and the journey is far from being pleasant, still we are willing to undergo any sacrifice while feasting upon the anticipated results of the Eldorado. I shall forward you communications at every opportunity and hope to hear of your success.

Yours truly, C. W. H.

A Criticism.

Our worthy contemporary the "Farmer and Mechanic," give us credit in last week's number for Mr. Froelich's rail road brake to prevent collisions. Our friend indulges in some misgivings about its qualities, well we like to see the criticism and the credit. But why was there nothing said about Mr. Gladney's new water wheel, taken from the Scientific American, also the article on the effects of steam on timber, which was translated for and appeared first in our columns.

TO COLOR COTTON BLACK.—Put clear cold water into a tub, sufficient to cover the goods, then put into it two and a half ounces of chloride of lime, then put in the goods a half an hour—take out and wring, then fill a tub a second time with clear water, put into it two ounces of the sulphate of iron, put in the goods ten minutes, then take out and wring; then put the sulphate of iron water into your dye kettle, and as much clear water as will cover the goods; then put in four ounces of the extract of logwood, one and a half ounce of the sulphate of copper, then boil in the goods from fifteen to thirty minutes.

NOTE.—After coloring, dip the cotton goods two or three times in the chloride of lime water, then wash well in hot strong soap suds and warm water.

INDIGO BLUE.—Pulverise two ounces of indigo; put in eight ounces of sulphuric acid, in a pitcher; put the indigo into the acid—a little at a time, and keep stirring it with a stick until all the indigo is in the acid. Let this mixture stand eight hours before you color, then boil water sufficient to cover the goods. Put in the mixture of indigo and acid, then your goods immediately afterwards—let them boil five minutes. This is designed for woolen or silks.—*Farmer and Mechanic.*

☞ Useful receipts are valuable, if correct, but if they are not correct they may be the means of doing much mischief. We copy the above receipts to point out their errors as some of our readers may chance to read them, and be led astray thereby. There are a great many receipts of a like character, which we see copied into various papers, just because they are receipts. The reason of this is, that there are not many who are sufficiently versed in practical chemistry to detect and point out unscientific errors.

1st.—The above receipt, will not color cotton black. The chloride of lime is not used for any purpose in the way of dyeing, it is only used by Physicians and Chemists, in frigorific mixtures to produce intense cold by mixing it with snow.

The way to dye black in cotton is this;—Boil your cotton goods in clear water, then wring them, then let them steep twelve hours in sumach liquor, at the rate of 2½ pounds boiled or scalded for every 10 pounds of cotton goods. After this wring them out of the sumach and handle them evenly in lime water, (hydrate not chloride of lime) for 15 minutes, wring them out of this and handle them well for 15 minutes in a solution of copperas, (sulphate of copper,) at the strength of one pound of copperas to ten pounds of cotton, wring them out of this and air them well, then run them through a weak solution of lime water (very weak) and afterwards wash them well, and wring them—they are then ready for the logwood. A solution of warm boiled logwood, at the rate of 4 pounds (of the kinds now to be got,) should be allowed for every ten pounds of the cotton goods, if yarn. In this liquor they should be handled for half an hour and afterwards dried.

We warrant this receipt to dye a good black on cotton goods, but there are some little things that can make it much faster, but the previous receipt is a burlesque on practical chemistry. Whoever heard of any person boiling cotton goods to dye a black, and then washing them in hot soap suds. Why the whole receipt is a compound of bleaching and dyeing mixed up together, producing the same effect in Chemistry as it would in practical mechanics to work an engine by raising the steam and then letting it escape without going into the cylinder.

2d.—The Indigo blue produced by the sulphate of indigo (chemic of the dyer,) is a fugitive color, it will not dye cotton, but by neutralizing the acid with chalk, but we warn every person from using it in the manner directed above, no silk goods should be boiled, in dyeing it would spoil the lustre of the silk

The receipt which we have given for black will be valuable to many of our readers who have small jobs of coloring for home made clothes.

Cohesion.

Is that species of attraction which, uniting particle to particle, retains together the component parts of the same mass; being thus distinguished from adhesion or that species of attraction which takes place between the surfaces of similar or dissimilar bodies. The absolute cohesion of solids is measured by the force necessary to pull them asunder. Thus, if a rod of iron be suspended in a vertical position, having weight attached to its lower extremity till the rod breaks, the whole weight attached to the rod, at the time of fracture, will be the measure of its cohesive force, or absolute cohesion.

The particles of solid bodies, in their natural state, are arranged in such a manner, that they are in equilibrium in respect to the forces which operate on them; therefore, when any new force is applied, it is evident that the equilibrium will be destroyed, and that the particles will move among themselves till it be restored. When the new force is applied to pull the body asunder, the body becomes longer in the direction of the force, which is called the extension; and its area at right angles to the direction of the force, contracts. When the force is applied to compress the body, it becomes shorter in the direction of the force which is called the compression; and the area of its section at right angles to the force, expands. In either case, a part of the heat, or any fluid that occupies the pores or interstices of the body, before the new force was made to act upon it, will be expelled.

The Upas Tree.

While Mr. Brooke, the Sultan of Saranah, was making geological examinations in Borneo for coal, he with his friends discovered an isolated Upas tree, nearly forty feet high. Its trunk was almost straight, its head a dense mass of dark green glossy foliage. The ground beneath its shade is crowded with tombs, yet vegetation flourished luxuriantly around its roots.

In tapping it, no bad effects were experienced from the effluvia. But on cutting it to obtain a portion of the wood, bark and juice, a man was so much stupified that he was obliged to desist. It is ascertained that the bread fruit tree, the mulberry, and cow tree of South America, belong to the same natural order as the deadly Upas.

Swarms of Locusts, or grasshoppers, have appeared in Texas, literally covering the ground in some places, and devouring the wheat and corn. In other parts of the State the corn and cotton have been much injured by cut worms.