

Scientific American

NEW-YORK, OCTOBER 18, 1851.

More Improvements Wanted.

To question the great fact, of incalculable benefits having been conferred upon mankind by modern inventions, would be absurd; but with all our admiration for modern genius and improvements, it would just be as absurd to undervalue a good thing because old, as it would be to glorify a bad thing because new; all that was done of old, was neither indifferent nor bad, all that is done now is neither moderate nor good. We saw, and plane, and match with machinery, and there is cheap furniture in abundance, but it is generally as worthless as it is cheap. Our ancestors made things to endure for more than a summer's sunshine or a winter's storm, and when we wish to procure solid and durable articles, good prices have still to be paid as of old. Stockings and stuff of that kind are rattled off with surprising dexterity, and produced at reduced rates, but the knit work of our grandmothers, the idolized socks which were woven in the looms of their trembling fingers, are worth a dozen of the spider framed modern nether garments.

Our great modern improvements consist in applying the power of water and steam, as substitutes for human and animal labor; and the blessings and benefits conferred by such applications of genius and science are beyond all price; but we are not at the end of improvements yet, nor shall we ever be at the end of them, while the human mind has a wish ungratified. Our steamboats now speed along at the rate of twenty miles per hour, and our railroads at the rate of forty and fifty. Some may think that all has been done that can be done, on both land and water, to make man pass through space with a velocity rapidly coming up to that of the ball projected from the cannon. But when Fulton's first boat cleft the waters of the Hudson, at the rate of eight miles per hour, and when the first locomotive attained the speed of twenty miles an hour, men of great minds did not doubt merely, but asserted that to look for greater results was an infatuation.

The time may yet come, (and it would certainly be a desirable invention) when men will cleave the air as swiftly and as safe as they now travel over the land by the iron horse. There is no good reason to doubt this as an impossibility, any more than to doubt our existence. Who a few years ago would have believed that pictures in all their glowing natural colors, could be painted in a few seconds by a sunbeam, yet it is even so, and such a picture has been on exhibition in London. Aerial locomotion is less problematical than the daguerreotype, although it has as yet been barely practicable. The day of its triumph cannot always be distant: some new idea out of the old beaten track which every aeronaut seems to tread in, will yet be developed, and then the results upon society, no one can conjecture.

We yet want a great number of inventions to complete the catalogue of desirable improvements. We want a machine which could print as easily as we now can write; what a saving it would cause in steel pens and wretched scrawling. It would also be very desirable if a domestic loom was produced, which by turning a crank would drive the shuttle and weave the web with easy and unfailing certainty. We now have machines to sow and machines to mow, but we want a machine to make our shoes and to mend them too, as well. More attention has perhaps been given to quantity than to quality in modern improvements. Inventors have yet a wide field before them—it is the master mind which strikes out a new track. A host of new machines have yet to be invented, and a host of improvements made on those machines now in use, in order that quality may show forth as pre-eminently as quantity.

United States Steamships.

Four years ago, we believe, there were only four ocean steamships belonging to the United States. What changes a few years have wrought,—no less than six American steamships sailed from this single port last Saturday!

Patent Office Report for 1850.—No. 5.

EXAMINER GALE'S REPORT.—Mr. Gale possesses the qualification of making an excellent Report: he presents one which appears to be indited with a spirit of candor. During the year 539 cases were referred to him for examination, all of which but 42 were disposed of. He mentions it as a singular thing, that 643 applications were examined by him on the previous year, or 146 more than in 1850. He says he is anxious to explain this, because it illustrates an important principle. The explanation is, that when Mr. Ewbank went into the Patent Office he ordered the Examiners to hurry up their business, to fulfil the old adage, "a new broom sweeps clean," in order to bring up all arrears of business, at the end of the year. To meet this desire of the Commissioner, Mr. Gale states, an unusual amount of mental and physical labor was performed by the Examiners, and most of them brought up their arrears; "the business of my own desk," says this Report, "was reported as finished up to 1850." Now, mind the sequel, which is candidly stated, and which shows a daring recklessness on the part of the Patent Office, or else this Report does; here is what it says, "As generally happens in work done hastily, so it was here, much of the business had to be reviewed and re-examined, and the results showed conclusively that hasty examinations of applications for patents, like hasty legislation, are productive of great evils and little good." He believes, however, that "the business of examining patents was never done better than at the present time," which statement exhibits a world of caution on the part of the Examiner, and may mean that the examinations were never well done, or were very well done, or were moderately well done at some time. He has four classes of subjects under charge, viz., Agriculture, Chemistry, Domestic Manufactures, and Wearing Apparel.

Leather was under his charge until April, 1850. Two hundred and thirty new patents were ordered, seven re-issues, two extensions, and one additional improvement. He had ten more applications than Examiner Renwick, and passed twenty-six more for patents. There were a number of very useful inventions presented and patented; no less than one hundred and seventeen for agricultural implements; fifty-three chemical, fourteen for leather; forty-three for household furniture; wearing apparel, eleven. Of the thirty patents for churns, we cannot say much for their utility. Of thirteen patents granted for plows, one with a flexible beam is the most prominent. For seed planters no less than twenty-seven were granted; we know that much attention has been and is still devoted to such machines, thus showing that there is a general dissatisfaction either with the complexity or principles of their construction. An ox yoke of a simple and good form was patented. It consists in having two staples, about three inches from the centre, instead of one staple in the middle, for the chain. The chain branches out into two parts, one of which has an adjustable device for varying the length of the branch chain, so as to give either ox the advantage, to let the lighter or weaker one draw his end of the yoke equally with the other.

He pays Mr. Paine a decided left-handed compliment, in respect to his water gas. He states that frequent inquiries had been made at the Patent Office about Paine's patent, but no such patent was granted; the only one granted for gas apparatus of any note, was Dr. Gesner's, for making the gas out of asphaltum. Mr. Gail Borden's soup bread patent is also particularly noticed.

A patent was granted for making glucose (grape sugar) out of corn meal, which is worthy of notice. Twenty-five bushels of corn meal are mixed with 150 gallons of water at a temperature of 175°, and to this is added 25 lbs. of oil of vitriol, to which, after stirring well, 50 more gallons of water are added, and the whole run into a boiler (a leaden one we presume), when the contents are boiled by high pressure steam. The boiling is continued until, by the trial of a little iodine, with a portion of the mixture in a saucer, it does not turn blue, which shows the operation to be complete. Chalk is then added to neutralize any of the free sulphuric acid, when the whole liquor above the sediment at the bottom, is run off and concentrated to crystallize. This is

one of the wonders of chemistry; sugar is now made of corn, by boiling it along with a most virulent acid. A machine for washing dishes was patented, but this engine, if valuable, has not yet found its way into the restaurants of New York, the only good places in the world, for testing its powers. The re-issue of Hibbard's patent for Tanning is somewhat flatteringly noticed. We published the specification of this patent in our last volume and made some free comments on it, we have therefore no more to say about it at this time.

The Fire Annihilator—An Old American Invention.

We behold here and there in flaming characters "Philips' Fire Annihilator," an English invention, which has been patented here, and the patent sold for a fine large sum, it is said, and under the patronage of a fine big company, comprising Elisha Whittlesey, of Washington, and some other gentlemen of note, but mostly notable on account of the fame of the manager, the celebrated P. T. Barnum. Well, it turns out that there is a prior inventor of such an apparatus, and by establishing his just claim to the discovery and application of it, he will annihilate the annihilator, so far as Philips' patent is concerned.

We have received a communication from G. W. Michal, of Marion, McDowell Co. N. C., together with an article published in the "Mountain Banner," by Dr. Wm. H. Graham, which fully establishes the claim of the Doctor, as being the original inventor of the Fire Annihilator. He claims the invention as far back as 1837, and in November of that year, he filed his specifications at the Patent Office at Washington, and the following language of his filed papers will show that it embraces the very principles claimed in Philips' patent, which we published in No. 1, of this volume, and to which we beg leave to refer our readers:

"Your applicant claims that he has made a new and useful invention for extinguishing fire and flame with carbonic gas, in a manner new and useful; the gas to be generated by chemical process, condensed through a proper medium, in a machine; and with appropriate appendages and appliances can be directed to any spot, projected to any elevation, so as to make it a practical and efficient agent for extinguishing fire cheaply, safely, quickly, and is far superior to any other means hitherto used or known for extinguishing the flames of a steamboat on fire or a ship burning in the middle of the ocean. I declare my belief that this discovery is destined to save thousands and thousands of lives, millions multiplied by millions, in value of property.

WM. A. GRAHAM.

Now owing to the superior method of examination, so highly characterized by Examiner Fitzgerald, in his last report as having been introduced in 1836, what do our readers think was the answer given by the Patent Office to Mr. Graham? Here it is:

"Your invention does not possess that novelty and utility which would justify this office in issuing a patent. Nor is it, indeed, believed to be capable of being carried into effect."

H. L. ELLSWORTH

To this Mr. Graham returned the answer. "I think all the objections to my specifications and to granting me a patent are fully met by the fact that by a series of experiments carefully made by myself, I have fully tested the efficacy and practicability of extinguishing fire in the mode I propose, cheaper, quicker, and with more certainty than any other hitherto used or known, and I am ready to convince the Commissioner of patents and the public of its efficiency by an exhibition of its effects."

The claim of Dr. Graham was refused out and out, and Mr. Ellsworth said he might withdraw his money, but he declined, and was told that it would act as a perpetual caveat in his favor. Now if the examiners had done their duty, no patent would have been granted for Philip's Fire Annihilator—so much for the superior system of examination. At that time, says Dr. Graham, there was a distinguished individual at Washington, to whom he was introduced, who was said to have great influence with the Patent Office, and who told him he could get a patent at a word, if he would put his name as a co-inventor in the

application, and give him one half of the patent. He refused to do this—he has the handwriting of this gentleman still in his possession.

This shows how the Patent Office was managed, and can we say it is any better now? Mr. Graham says he is going to Washington this winter to renew his claim; but this is not the way to proceed. He must renew his application at the Patent Office, and demand of the Commissioner an interference, and time will be given to try the case. He will then establish his claim, a patent will be granted to him, and the other will be declared void, unless there is a distinguished difference between them. We do not think much of the Fire Annihilator, for we consider that for all effectual purposes, carbonic acid gas never will be a cheap substitute for water, but we say, "honor to whom honor is due, and justice to whom justice is due."

We have heard of the Annihilator having put out a small fire here and there; well Mr. Graham set fire to an old frame house, in which he kindled three cart loads of shavings, and with two extinguishers on a wheel barrow, himself and a boy, when the house was in flames, opened the nozzles of his hose, and let in his gas on the house, which he extinguished in three minutes. So much for its efficacy, it did as much as Philips' is capable of doing. We do not say but Mr. Philips was an original inventor, but Mr. Graham is the oldest.

A Word to Apprentices.

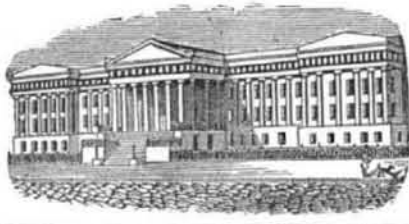
Since the commencement of the present volume of the Scientific American, we have been favored with nearly twice as many subscribers, who have taken advantage of the inducement offered to clubs, as up to the same number (No. 5) on any previous volume.

We are particularly happy to find apprentices so active, this year, in getting up clubs; it shows they have a taste for the right kind of reading, and we venture to assert that most of such young men will become eminent in their profession. Many apprentices, no doubt, think their incomes are too small to admit of their paying \$2 a-year for a newspaper, but let none of you abandon the idea of having the Scientific American on that account, but proceed at once and get up a club among your fellow workmen, which will enable you to receive your paper gratuitously. Appeal to your employers and get their names to head your list, then solicit the aid of your fellow-workmen, setting forth the object you strive for, and nine times out of ten we will warrant you success in your laudable effort. Let every apprentice strive to get a club, and let every proprietor and journeyman employed, encourage "The Apprentice Boy" by subscribing with him for the "Scientific American,"—it will be a satisfaction to you through life, to think you rendered your mite towards placing in the hands of a youth eager for practical knowledge, a publication from which no injury can arise, and from which much good assuredly will.

Fringe Twisting Machine.

The Editor of the Fitchburg Sentinel, who recently visited the Middlesex Mechanics' Fair at Lowell, after noticing several articles, says: "But that which seemed to attract most attention, was the machine for twisting the fringe for shawls, invented by Mr. John Nesmeth and Wesley Sawyer. Till quite recently all such fringes were twisted by hand, and two shawls were a good day's work for a smart girl. Two or three years ago a machine was got up at Lawrence, which would twist ten or twelve per day, and this was thought a great improvement. The Lowell Machine will twist 150 shawls easily—both side and end fringes, and what is of great importance, will do the work in the piece, and also before the pieces are scoured, if necessary—so that any oil which the goods may receive in the operation, may be afterwards cleaned as easily as when they first leave the loom. The apparatus for twisting a double fringe at the ends of shawls is particularly ingenious and worthy examination."—[Worcester Transcript.]

We would really like to know if this machine does anything more than merely double and twist the yarn into fringe; if not, we must say that machinery for making the French bullion fringe is old and well known. We have seen them in operation some years ago.



Reported expressly for the Scientific American, from the Patent Office Records. Patentees will find it for their interest to have their inventions illustrated in the Scientific American, as it has by far a larger circulation than any other journal of its class in America, and is the only source to which the public are accustomed to refer for the latest improvements. No charge is made except for the execution of the engravings, which belong to the patentee after publication.

### LIST OF PATENT CLAIMS

Issued from the United States Patent Office FOR THE WEEK ENDING OCTOBER 7, 1851.

To E. C. Brett, of Great Barrington, Mass., for improvement in machines for Opening and Cleaning Flocks.

I claim the arrangement and combination of the conical revolving grater within the close grater case, combined with the blowers, in the manner and for the purpose substantially as described.

To D. & R. Pratt, of Elmira, N. Y., for improvements in apparatus for applying Flocks to Cloth.

We claim the revolving screen, having a beater within it, on a shaft, as described, in combination with the corrugated rollers, constructed and operating in the manner and for the purpose substantially as set forth.

To N. C. Towle, of Washington, D. C., for improvement in Tanning.

I claim the use of arsenic or arsenous acid, substantially in the manner and for the purposes herein set forth. The peculiar properties of arsenic, by which it tends to suspend the natural tendency of the animal fibre to decomposition upon the extinction of animal life, are well known, and of course they are not patentable; but their application to the processes of tanning and otherwise preparing skins and hides for useful purposes, by which they are rendered stronger and more durable, is believed not to have been heretofore known and used.

I do not, therefore, intend to limit my claim to any particular mode or period of using the article, but I shall apply it in such form, or in such strength of solution as the nature of the case may require, to effect the objects named. Workmen should guard against the absorption of the poisonous qualities of the arsenic, while immersing or handling the skins in the liquor, by using tools or wearing india rubber gloves. After the skins are taken out of the liquor, and rinsed thoroughly the danger ceases.

To C. F. Fisher, of New Orleans, La., for improvement in the Endless Chain Propeller.

I do not mean to claim the invention of the endless chain propeller, or the application of the endless chains to communicate power from one wheel to another. But what I claim is suspending the endless chain propeller, which is to be put in motion by an endless chain running on the side wheel, on the principal drum under water, in a rigid frame, inside of the water-tight chamber, the frame being capable of an upward and downward motion parallel to itself, by means of the four racks and pinions, or their equivalents, acted upon by gearing, connected each to each, said frame being connected with an indicator, by which the situation of the propeller may be ascertained, the whole constructed substantially in the manner and for the purposes described.

Second, I claim the sliding lid to the aperture in the bottom of the vessel, through which the propeller projects when lowered for operation, but when the propeller is raised inside of the vessel, the lid closes the aperture, so that the speed of the vessel may not be impeded when under sail alone, by the action of the water on the aperture in the bottom, said sliding lid being worked by a screw, or its equivalent, in connection with an indicator, by which the position of the lid can be seen, substantially as described.

To W. Clements, of Ellerslie, Ga., for improvement in devices for sowing in a Seed Planter.

I claim the novel manner of discharging the seed by the natural motion of the horse, or other animal, while in the act of walking and propelling the drill, without the aid of wheels,

with the arrangement of levers, arms, &c., for discharging the seed, or their equivalents, operating in the manner and for the purpose set forth.

To James Fulton, of Louisville, Ky., for improvement in Escapements for Time Pieces.

I claim the combination of the pallets and lever or levers, as set forth, with the described mode of communicating impulse to the balance in time pieces which keep time by means of a balance.

To J. H. Murrill, of Manchester, Va., for improvement in Running Gear of Locomotives.

I claim the manner of employing the unflanged driving wheels, connected and arranged as described, with the flanged truck wheels at the forward end of the engine, in combination with the flanged driving wheels, for the purpose of increasing the traction or adhesion of the driving wheels to the rails for overcoming steep grades without increasing the weight of the engine.

To Wm. Scott, of Rising Sun, Ind., for improvement in Revolving Boilers.

I claim the combination of the small cylinders (two) provided with apertures and rims, as described, with the distributing chamber; the whole revolving round a common axis, and operating substantially as described.

To Joshua Stevens, of Chicopee, Mass., (assignor to Mass. Arms Co.), for improvement in Revolving Breech Pistols.

I do not claim to make the latch hook alone revolve on the barrel, but I claim the improvement of so connecting or combining the latch hook, the slide bearing of the rammer and the lever with the barrel, by means of the swivel tube, or any analogous contrivance, as to enable them to be all simultaneously turned laterally, or revolved around the axis of the barrel, and thereby remove any obstruction to the elevation or upward movement of the barrel, such as may be necessary in order to effect the removal of the cylinder of the charging chambers from the arbor on which it is supported.

To Le Grand C. St. John, of Buffalo, N. Y., for improvement in apparatus for Warming Air and Water for dwellings.

I claim the construction of a fire-proof apartment in houses, extending from the lowest extremity of the house to the roof, with the furnace at the bottom, the smoke pipes of other fires entering it, and winding along its walls to a chimney at the top, and with openings to let the heat in the apartment into the house or up the chimney, and also for the construction of cisterns within the fire-proof apartment, with pipes, as described.

To Orion Thornley, of Lebanon, Ind., for improvement in machines for Cutting Screws on Posts and Rails of Bedsteads.

I claim the trifurcated travellers, in combination with the right and left screw axle, the carriage, saddles, hollow axle, and cutters, (two), whereby the threads of two beam tenons and two sockets are cut by one and the same operation; the several devices being constructed and arranged in the manner and for the purpose set forth.

To Patrick Killin, of Mount Healthy, Ohio, for improvement in Portable Elevated Ovens.

I claim the arrangement, as described, of the inner and outer concentric tubes, with respect to the oven and pot hole, as described, whereby the oven is equally heated by a small fire, and the heat is directed by the inner upright pipe against the bottom of the kettle or other vessel, thus enabling the user to conduct simultaneously the several operations of baking and boiling with a small fire and with economy of fuel.

To Spencer Lewis, of Rochester, N. Y., for improvement in machines for Cutting Screws on Rails for Bedsteads.

I claim, first, in combination with the central screw shaft, through which the rotation of the cylinder is effected, the hollow screw shaft, provided with an inverse screw thread and the cylindrical case, having an inverse screw thread matching with the male screw thread of the hollow shaft, the whole being arranged as set forth, and operated by means of the bolts (two) and cam on the cross head, in such a manner as to feed the cylinder, frontward, simultaneously with a right or leftward rotation thereof, as fully described.

Second, I also claim the employment of the screw shanks (two) provided with toothed wheels (two) made to match with toothed or

ribbed plates (two), forming one of the sides of each box, the outer ends of said screw shanks being confined in inverse screws formed in plates, *dd*, whilst their inner or pointed ends are supported by plates, *KK*, having projections against which the shoulder of the rail acts, for the purpose of actuating said screw shanks rotarily, for imparting thereto a lateral movement in such a manner as to cause their pointed ends to enter the rail, and be locked thereto by the spring levers, said screw shanks being detached from the rail when unlocked, by simply withdrawing the implement these form, as described.

Third, I further claim the employment of the semicircular plate of the cross-head, in combination with the spring levers (two), for the purpose of actuating said spring levers, in locking and unlocking the plates, *KK*, of the screw shanks at the terminus of the receding movement of the cylinder, whether cutting the right or left screw, as described.

Fourth, I also claim confining each V-shaped cutter to the reversible cylinder, by means of the segmental brace plate, notched at one end, so as to interlock with the end of the shank of the cutter, projecting through an opening in the cylinder, whilst its opposite end is made to fit against the frontward portion of the cutter, as shown, said segmental brace plate being secured by means of a screw bolt passing through it and the cylinder, and pressing upon the shank of the cutter in such a manner as to form a complete lock thereto, there being a binding pressure at four points upon the cutter, viz., at either extremity thereof, at the connection of the brace plate with the frontward end of the cutter, and at the centre by the confining screw bolt, thus rendering it impossible to move the cutter without fracturing the segmental brace plate and displacing the screw bolts, as described.

To Clement Masserano, of Turin, Sardinia, (assignor to Clement Masserano, Josephine Wickliffe, administrator of R. Wickliffe, Jr., of Lexington, Ky., Charles Carangi, Andre Crestadora, Pellegrino, Rocca and Louis B. Migone, of Genoa, Sardinia, for improvements in Locomotives, moved by the Power of Animals.

I claim, first, the combination with the endless platform of an adjusting apparatus, by means of which the inclination of the platform to the frame of the power carriage may be varied to enable the horses to work to the best advantage, whether to accelerate or to retard the movement of the impulsoria, in traversing, ascending or descending grades.

Second, I also claim the method of connecting the frame of the impulsoria with the pilot, by means of a longitudinal shaft, which is fitted with mechanism by means of which the impulsoria can be adjusted transversely to keep the driving axle level, and to prevent the endless platform from sloping crosswise when traversing a road, one of whose sides is higher than the other.

And lastly I claim in an apparatus adapted to propulsion by animals, substantially as described, the employment of a single driving wheel, arranged in such manner as to admit of being leaned towards the hill, in travelling across slopes to prevent a transverse sloping of the endless platform on which the animals walk when the wheel thus arranged is steered by a pilot before and a follower behind, or their equivalent, substantially as set forth.

[This patent was granted, we suppose, on account of its novelty. It is no doubt novel to disintomb some ancient Assyrian Bull, and we suppose that, as Layard has recently disintombd one of these gentry, this invention is brought forth to be yoked to the horns of the Oriental Mammal. We can conceive of no other good reason why a patent was granted for an ox impulsoria for railroads. For a view of an animal impulsoria, we refer our readers to Brandreth's Patent Cyclopede, page 619 "Hebert's History of the Steam Engine."]

To C. S. Buckley, of Macon, Ga., for improvement in Circuit Changes for Electro Magnetic Telegraphs.

I claim the circuit changer, substantially as described, in combination with the arrangement of wires, magnets, &c., as set forth, for the purpose of enabling the operator at either one of two distant stations, to arrange the connections at the intermediate stations, so that he can write through to the other end station at pleasure. [This we have reason to believe is a very excellent improvement on telegraphs.]

### Petition for Extension of a Patent.

U. S. Patent Office, October 6, 1851.—On the petition of M. Sorel, of France, praying for the extension of a patent, granted to him for an improved method of preserving iron and steel from rust or oxidation, for seven years from the expiration of said patent, which takes place on the seventh day of December, 1851:

It is ordered that said petition be heard at the Patent Office on Saturday, the 6th of December, 1851, at 12 o'clock M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not to be granted.

Persons opposing the extension are required to file in the Patent Office their objections, specifically set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

THOS. EW BANK, Com. of Patents.

For the Scientific American.  
Patent Office Building.

Allow me to trouble you and your readers with a few remarks in reply to the article in your paper of the 4th inst., page 18.

1st—When I said that "the original Plan contemplated a brick building with wooden floors, filled in between the joists with brick," I stated nothing but the fact; and if reference is had to the fire-proof character of the building by the Committee, this filling between the joists with brick constituted that fire-proof character—no brick arching, as executed in the building, was ever thought of.

2nd—If there were any "plans of the various floors, made by Mr. Elliot, with vertical, longitudinal, and transverse sections, and a perspective view of the building,"—they never came into my possession when appointed the Architect to execute the building; though, as I stated, sought for—consequently I had to begin, *de novo*, to originate all the details.

I have nothing further, Messrs. Editors, to state, than my regret to have troubled you or your readers, with my remarks on this subject—I was driven into the defence I made in your journal (page 387, Vol. 6) in reply to the article you refer to as in No. 20, where the writer seemed to wish to accord the merit of this work to the mere projector of the outline of the Plan, paying no regard to, nor even once naming, the Architect who had all the labor of filling up the details, and executing the work in a manner that received the good opinion of all, including the gentleman you name as the projector of the original Plan. Respectfully,  
ROBERT MILLS, Architect.

Washington, Oct. 6, 1851.

### Mechanism.

We select the following from our excellent cotemporary, the "Yankee Nation," published in Boston for \$2 per annum:

"How grateful to the eye of a mechanic is perfection in machinery, or works of art of any kind. We do not mean by this to include all in our remarks who work at mechanical branches, for there are some who have not an idea above the crank of a grindstone or a wood saw. We mean men who have brains to contrive as well as construct, and to such, and such only, do our remarks apply. These thoughts are awakened by the recent exhibitions which have taken place not only in the many different parts of our country, but also of our world. We were particularly struck with the force of this on our first visit to the Mechanics' Fair, at Lowell, where, in striking contrast, were exhibited the perfection of modern improvement in the shape of a cotton spindle, and one of the first ever used in this country. It is by contrast, only, we can see the improvement; placed side by side, they exhibit their perfections, as also their imperfections. To such as desire improvement in scientifics, we recommend the Scientific American, published in New York city."

### The Eatonton Railroad.

The Macon Journal & Messenger says:—"The work is progressing rapidly. There are now about 300 men employed upon the grading and masonry, and it is confidently expected that the next crop of Putnam will be carried to market over the road."