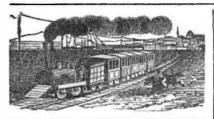
# Scientific American.



#### Our Patent Agency.

From the crowded state of our advertising columns for a few weeks past, we have been unable to insert our Patent Agency advertise. ment, but we wish our patrons to understand that we pursue that branch of our business on an extensive scale as usual and with the accustomed success that has rendered our establishment so extensively and favorably known throughout the country.

More applications for patents are made through the office of the Scientific American, than through any other six agencies in the United States. That is an assertion which we not only make, but can prove.

Inventors who desire to make application for letters Patent should remember that the BEST PATENT AGENCY in the United States is at the "SCIENTIFIC AMERICAN" Office, 128 Fulton St., N. Y.

Great Patent Case.--Blanchard Gun Stock Turning Factory vs. Brown, Eldridge and others.

These were several cases, the trial of which together commenced in Philadelphia before Judge Grier on Monday the 16th of April and were concluded on Wednesday the 25th. The defence set up by all the defendants alike was first, that Thomas Blanchard was not the original inventor of the Turning Lathe described in his patent ; that the same was first invented by Azariah Woolworth, of Waterbury, Connecticut : and also that theirs the defendents' machines were not infringements of Blanchard's patent, even if the same were good ; that theirs would turn all sizes from one and the same model, and that Blanchard's as described in his specification would not.

Mr. Blanchard and also Mr. Woolworth were present, and both examined as witnesses. Their testimony was corroborated, and it appears that Mr. Woolworth never thought that he invented anything more than working over a model by sections. Mr. Blanchard proved that he had invented and brought into use at Millbury, Massachusetts, his present patented machine for turning gun stocks as early as May 1818, having previously in 1817 invented his machine for turning gun barrels by working over a model. Witnesses were produced who proved that the defendents' machines would not turn a proportional fac-simile without structly following the directions of Blanchard's specification and that it did describe a mode which was the best and only true mode of performing the same. The evidence also proved that Woolworth's Finishing Machine, which was set up to be prior to Blanchard's, was ever fully completed until March 1820, being nearly two years after Blanchard had publicly exhibited his, and some time after his patent was issued; and that then it was to finish lasts previously cut by a gouge machine.

These suits completely established the novelty, originality and usefulness of Thomas Blanchard's invention over any machine for the purpose of turning irregular forms, either ever known here, or published in any works or seen in Europe.

The Jury came in with the following verdicts in favor of plaintiffs. Against Brown, \$249 60; Eldridge, \$280 80; Miller, \$39 00 and Yocum & Wilson, \$176 80.

We would call the attention of our readers to the advertisement of Mr. John Kimball on another page, as one worthy of their attention. Specimens of Lasts and Spokes manufactured by his machine, may be seen at this office.

#### Opodeldoc.

White Castile soap, cut very small, 2 lbs.; camphor 5 oz.; oil of rosemary 1 oz.; oil of origanum 2 oz.; rectified spirits 1 gal.; dissolve in a corn bottle by the heat of a water bath, and when considerably cooled, strain ; add liquor of ammonia 11 oz.; immediately put it into bottles, cork close and tie over with bladder.

Steam Boiler Explosions.

MESSRS EDITORS .- In your paper of Saturday 21st.there is a notice of Steam Boiler Explosions, the causes, &c. in which you mention the explosion of the steamer Defiance. near New Orleans. There are numbers of explosions that are accounted for in as , many different ways, and from various causes, such as the locomotive Tahconic spoken of ; and if I recollect, the locomotive Richmond, on the Reading Railway, which was supposed to have been caused by lightning ; but there are also some boilers, the cause of whose explosion is certain, and might be foretold with as much correctness as it is possible to foretell the result consequent upon touching off a charge, placed in a rock for the purpose of blasting it. The Defiance named above is an instance. It had a new boiler, one of Montgomery's Patent, the shell of which was nine feet in diameter, made of iron a quarter of an inch thick, with a hole cut out for a steam drum, I believe some six feet in diameter !and this boiler was made to carry high pressure steam probably 100 to 150 lbs. per square inch ! The result, in my opinion, is not to be wondered at, and I think any engineer will agree with me in opinion. This is not the only boiler that has exploded from a like cause, to the great destruction of human life and property, yet strangely enough it is considered as a matter of course, as if perfectly right-not even an investigation being made into the matter. Yours,

# PUBLIC SAFETY.

Georgia Manufactures and Railroads. Within a few years past, says the Savannah Republican, the State of Georgia has at one bound placed herself indisputably in advance of any other Southern State in manufacturing enterprise and internal improvements. We have between forty and fifty manufactories with from 100 to 5,000 spindles in each, in operation in this State. Our mines have been partially explored, and we are producing superior railroad iron, castings, marble, lime, at a price so low that is used in considerable quantities to revive the worn out lands of the State

The eternal fields of cotton, and nothing but cotton, no longer appear in the up-country, except to a limited extent. The cultivation of that staple in the Northern Counties will comparatively cease in a few years, and be transferred more and more to the fertile bottoms of South Western Georgia. The hill sides in the Cherokee region and middle Georgia are now smiling with green crops of wheat and other small grains. There are flouring mills, as the Etowah, Lebanon, Columbus, those in Clarke, and elsewhere, where the wheat is purchased at a liberal price and converted into flour, which has some time since found its way to the Atlantic markets, while some has been exported from this port to Brazil and other countries. The article of Northern flour is now almost banished from this market. One year the Central Railroad conveyed into the interior 6,000 bbls. of Northren flour; the year following it brought down 6000 bbls. of Georgia flour, the upward current being completely turned.

These manufactories and railroads have created home markets. They give employment to the farmer, carpenter, the mason, the tanner, the miner, and in short to almost all who follow the various and devious ways of human industry. The moral and physicial influence of our Railroads in bringing about this new order of things is not sufficiently appreciated. The Up-Country is now no longer a sealed book. The travel on the State Road has probably quadrupled since it was open to Dalton It will increase vastly more when it is completed to the Tennessee River.

It has been estimated that when the Nashville and Chattanooga Railroad is completed, the Georgia Road will require four times its present locomotive power. Our great work has already paid back to the State the cost of its construction in the shape of a multitude of benefits, beyond the power of calculation, and it is not a daring prophesy to make that in less than twenty-five years it will pay all the debt of the State-principal and interest and relieve her citizens from all taxation.

Some inventors of this city have nominated Gen. Harvey for Commissioner of Patents.

Naphtha.

The very loose application of the name " Naphtha," which originally belonged to gencer says that this article surpasses all othvolatile hydro carbonaceous liquids found at certain places in the earth, and which has since been adopted for the somewhat similar substance distilled from coal tar, as well as for the very different pyroxylic spirit, is productive of frequent inconvenience. A greater precision in common nomenclature is highly desireable. It would be an improvement, perhaps, if the word " naphtha" were accepted as a generic term for liquid hydrocarbons of ascertained or probably pyrogenous origin (or even without this restriction), and if a special prefix were always used to indicate the nature of every particular instance. Thus earth or native naphtha, schist-naphtha, animal naphtha, &c., would be at once intelligible. Wood-maphtha would designate the interesting hydro carbonaceous fluids of woodtar, and would leave the term " wood-spirit" to the compound to which it is already appropriated, and which has already as many synonyms as can reasonably be required. Additional epithets would mark the distinct substances obtained from anyone source : thus in the case of coal-tar, which yields two sorts of oil having the well marked difference of being, one lighter, the other heavier, thanwater, there would be light coal-naptha, which terms will be adopted in this paper.

#### Punishment of Laxity of Discipline.

A short time ago the steamship Forth of the Royal West India Mail Line, was lost on the coast of South America. The circumstances of the wreck of the vessel is generally well known and was considered to have arisen from carelessness. On the 31st of last month acommittee of enquiry was held in Southam. ton, England, before which the evidence demonstrated that there was, 1st. an error in reckoning, which ought to have been counteracted by different observations and attention to the sounding lead, 2nd, a violation of the Company's regulations in regard to frequent soundings, and 3rd, by taking from post one of the look out men. The resolution arrived at was, a laxity of discipline caused her position to be wrongly computed, and her total destruction consequently followed.

The decision of the committee was a recommendation to the Court of Directors of the dismissal of Captain Sturdie and the chief officer from the company's service, the second officer should be reduced to the grade of third officer for one voyage, the third officer reduced to the grade of fourth officer for one year.

#### How to Make Cream Cheese.

For two cream cheeses, take six quarts of new milk, and one of sweet cream, to which add two or three spoonsful of rennet, and let it stand until sufficiently firm-spread a linen cloth in a large basin of cold water, lay the curd gently on it, tie the cloth and hang it up to drain four or five hours in a cool place; tnen change the cloth, and put the curd ' into a vessel, the circumference of a common plate and press it moderately six or eight hours, when it must be taken out, and turned, and split horizontally with a thread ; lay the cloth between the two cakes, and again put them in press for 12 or 14 hours ; if then pressed enough which can be ascertained by their firmness, keep them in fresh grass a few days, turning them morning and evening. The price of these cheeses, about the fill of a common dining plate, is 25 cents.

#### Black and White Mouse

Some student of Princeton College has been gulling the people of Trenton, N. J. with a wonderful account of a mouse changed black and white by Professor Loomis while experimenting with it by the battery in a jar of oxygen. The whole account is published as a most wonderful discovery in the Trenton News, and the cause of the phenomena is attributed to Professor Henry's magnet being suspended in the room. There are some things in the world that are " fixed facts," and there are other things that are fixed falsehoods.

Benjamin Silliman, assistant professor of chemistry in Yale College, and son of the celebrated chemist of that name, has been appointed to the Chair of Chemistry in the Medical University of Louisville.

#### Iron Cinder Roads.

A correspondent of the National Intellier materials for the construction of roads, the particles being too heavy to be moved by the wind; and after a rain they rust and cement together, and by use become perfectly smooth and solid and will endure for a length of time. He suggests that the middle of the avenue, not paved instead of gravel, should be covered with iron cinder, which would make a complete finish, at little more cost than the gravel, and surpass all other roads or streets in this or any other country.

As we know a little about such kind of roads we presume that the furnace ashes are meant in the above. They do make a hard compact road after having been well trod, rolled and pounded. But with coarse ashes for an underlayer and sifted ashes above them to the depth of 6 inches, then pound the whole well down, and take our word for it, a road of no common quality will be the result.

### A New Manure.

Robert Bryson, Esq. of Cumberland county, about eight miles from Harrisburg, Va. has been experimenting for the last ten years, to make exhausted tan bark available and valuable as manure. Besides his magnificient farm, he likewise carries on the tanning business. Finally, after a great deal of expense, and many failures, he has succeeded in dis. covering a method of producing from the tan an efficient manure. This is his plan : He has his tan wheeled out on a level piece of ground, and leveled off two or three feet thick. Over this he spreads a layer of two or three inches of lime, and over that again a strata of tan-then a layer of lime, and so on. He lets the bed so prepared remain for two years; at the end of that time he finds himself in possession of a bed of manure, the effects of which upon the land can hardly be surpassed, for the richness of its product, and the durable fertility which it imparts.

Newspaper Stamps in Great Britain. The number of penny stamps issued for Newspapers in England, Scotland and Ireland during the year 1848, amounted to 82,002,785 and 8,925,792 halfpenny stamps, of which England had 67,476,768 penny, and 8,704,-236 halfpenny, amounting in the aggregate to 90.628.586.

The number of London papers circulating in 1848, amounted to 159, which paid on 863, 888 advertisements at one shilling and sixpence each, duty to the amount of £64.791. The number of provincial papers same time

was 238, paying £60,320 duty. In Scotland the number was 97, paying £17,562, and in Ireland 117, paying £10,342

In Ireland with a population three times more than Scotland, there are fewer papers circulated, while England has no more according to her population, and there is no doubt but the London papers have a large circulation in the cities of Scotland. The above statements will afford evidence of the superior intelligence of the one nation, or if this is not the case, the poverty of the other.

# Ten Hour Law.

The ten hour law in Maine went into effect last Friday. The law provides that ten hours shall be a legal day's work and no man shall be compelled to performmore except by special contract; from this provision monthly labor and agricultural employments are excepted. No corporation or manufacturer is allowed to employ a minor under 16 more than ten hours a day under the penalty of a fine not exceeding \$100.

## Qnackery .--- Red Cloth a Cure for Small

Pox. John of Gaddesden, the Physician to Edward the Second, 1320, our earliest English medical author, had a great taste for an amulet, and an anodyne necklace. He, in his "Rosa Anglica," gives this admirable recipe for the small-pox :--" Immediately after the eruption, cause the whole body of your patient to be wrapped in scarlet cloth, or in any other red cloth, and command everything about the bed to be made red: this is an excellent cure. It was in this manner I treated the son of the noble King of England, when he had the small-pox, and I cured him without leaving a mark."