
[Reported offcially for the scientific American.]
List of patent claims theued from the United States Patent Office por tais wbar exdina marca $7,1854$.






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| [see engraving of this machine on page 164, vol. 8, |









 gauge, as described.
CAn engraving of 136, of this volume.]








[SSee notice of this invention on page 380, Vol. 8.]










 Rexira Mroixes-Georye gevan,of West Earl Town.




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Brico Maccrasg. Seaman C. Ripley, of New Yor













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 [This is a good improvement, and is noticed on pag MAcBnes fon Diluing Sronss William C. Wrizht or


 LA no otice of thisinvention is published on page 108 of
the presen t tolume.


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will realize a proper remuneration for it.]



















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valints, as describech.
Nots.-In the above list of patents, eleven of the appications were prepared at the scientific American Pa
tent Agency. We think it it sthe largest list ever issued to our clients at one time. We congratulate them upon theirfavorable prospects, and urge them to usediligence a bringing out their inventions before the public. Now they are fresh and
they possses value.

## Explosion of a Steamboat Boiler..-The New

On the 17th ult., the steamboat "Kate Kear ney " exploded one of her boilers while lying at the dock in St. Louis, Mo, by which catastrophe four persons were instantly killed, and twenty severely scalded, some of whom have since died. We have seen it stated that this explo-
sion was caused by gross carelessiness. The St. sion was caused by gross carelessiness. The St.
Louis "Republican" states that the U.S. District dttorney, Thomas C. Reynolds, has entered into a vigorous prosecution of the parties to whose carelessness and recklessness the deplor able catastrophe is attributed. The Captain as been arrested and required to enter into bonds of $\$ 5,000$ for his appearance at trial. One of the Deputy Marshals was subsequently sent to Alton with a warrant for the arrest of the engineer, Albert Hardy. Both of these oficers of the "Kearney" will be prosecuted for manslaughter under the Steamboat Law. The affidavit of carelessness was made by the In spectors, and is levelled exclusively against the Captain and Engineer.
It appearsto us that the steamboat Inspec tors under the New Law for that District are aleo blamable, and their conduct shonld likewise be subjected to a rigid examination. Th "Kate Kearney" was an old boat, and the Louis ville "Evening News" states that part of the boiler which was blown on the Levee exhibited an old fracture, and was much incrustedinside. The same boiler had collapsed once before, in 1851, and was merely mended, as testified to by the Captain and one of the owners, and it had Inspectors ever came to test this boiler, as it is stated they did, and allow it to pass, is some thing that requires explanation. It makes no matter how many good laws may* be enacted for the preservation of life from explosions they will all be no better than blanks on the statute book, if the officers appointed to carry them out, neglect to do their duty. The constant tendency of our institutions has been to appoint men to all offices from political party motives, not for personal merit. This party policy should be abolished with respect to such offices as those of Inspectors under the Steamboat Law.
One great cause of explosions on our western boats, we see, has been brought to light by the investigation of the local Inspectors of Cincinna$\mathrm{ti}_{\mathrm{i}}$ into the causes of the collapse of a flue in a boiler of the steamer "Zach. Taylor," by which three lives were lost and several persons injured. Among othér things, the testimony which has been laid before them shows that the iro of which the fiues were made, instead of bein
uniformly one-fourth of an inch in thickness, uniformly one-fourth of an inch in thickness, had
the appearance of piled iron, not welded in rolling, and it varied in thickness as much a thirty per cent.-being in some places little more than one-eighth of an inch thick.
Now, as a boiler can only be of the strength of the weakest part of it, every boiler should the Inspectors do not do this, they, above al other persons, deserve to be severely punished.


Another Terrible Steam Boiler Exploaion.
On the 2nd inst. On the 2nd inst. a steam boiler exploded
with terrific violence at the car factory of Messrs. Fales \& Gray, Hartford, Conn., by which nine persons were instantly killed, and building containing it was destroyed, and muc
other damage done. The boiler which exploded was nearly new, made of the best materials, was five feet in diameter, and twenty-four feet long. From the evidence presented before the Coroner's Jury, we are of the opinion that the cause of the explosion was allowing the water in the boiler to get below the fire line of the fue, whereby it-the boiler-became red hot, and weak at the fire line, and when cold water was let in, the steam began to generate so rapidly that the metal gave way-explodedscattering death and destruction around. It seems that the boiler had five flues, which were carried pretty high, thereby increasing the danger, and requiring greater attention.
It has been suggested to us that government should offer a suitable reward for some invention that will be a perfect preventive of steam boiler explosions. We must say that the cause of steam boiler explosions is not a mystery; it is well known, and such catastrophies can all be prevented if men are only cautions, careful, and attentive. We seldom hear of a steam boiler exploding in France. We believe that no more than two boilers have exploded in that country in twenty years. This has not been owing to any wonderful application of apparatus, or a superior mode of constructing French boilers, but simply because low pressure steam is generally used, and a good and rigid system of steam boiler inspection enforced. The most perfect means to prevent explosions is at the command of all, but they are not applied. The pressure of thesteam on the exploded boiler was 80 lbs. to the square inch, or equal to something more than five tons and a half on every square foot. However strong the iron of the boiler might have been when cold, it became very weak when highly heated.

## Professor Agassiz

In his lectures before the Lowell Institute, in Boston, says that the human racc existed on the globe a hundred and fifty thousand years go. This he proves to his own satisfaction. He points ont differences in the physical struc ures of the different races of men, greater than those existing between the orang-outang and he chimpanzee--animals which naturalists it gard as different species. He concludes, thereore, that men sprang from different stocks.[Exchange.
[We have seen many such opinions accredted to Prof. Agassiz, but have never been able o see a correct and certified report of his opinto see
ions.

## Remedy for Chilblains.

Take a sufficient quantity of hot water in a tub to bathe the feet in, and add a lye made of wood ashes or potash, until the water feels quite soft and slippery. Soak the feet which re troubled with chilblains thoroughly in this, hen rub them with a towel until they are perfecty dry. After this rub them over lightly with he spirits of turpentine, and it will at once stay the disagreeable sensations arising from the chilblains. Follow up this operation for a few evenings, and a cure will assuredly be ef ected, as I have proved by experience.
J. M. T.

Irvine, Pa.
Reaping Machines.
We have in our possession some very rare and valuable information in regard to the progress of this class of agricultural implements, and shall present it in a series of articles, to gether with illustrations, as soon as we can find pace for them.

Hobb's Lock Picked.
The famous American Lock, known in Engand by the above name, has, it is stated by the London papers, been picked at last by a Cockney. We have not yet received an account of the particulars connected with this affair.

The locomotive "Manehester" exploded at Hudson, on the Hudson River Railroad, on the 10th inst. Theengineer was instantly killed.

A Bill is now before the Legislature of this State, making it obligatory on all ferry steamapparatus.

