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Rallroad Conventions．
A Railroad to the Pacific seems to be the ruling public passion at present；Conventions to take the subject into consideration have been held in Chicago，St．Louis and Memphis． It is not possible to harmonize the conflicting interests of different parts of our country，in a work of this kind，and this shows us how de－ licate a matter public improvements in the hands of the General Government is．It is actually impossible to please or do justice in a great number of cases，and this one of a Na－ tional Atlantic Pacific Railroad is one in point． The conflicting interests and feelings of our people in various parts，such as those of Mem． phis and St．Louis，will no doubt prevent the General Government having anything to do with the building of the road．The Govern－ ment may make surveys and grant some privi－ leges，in ceding the lands through which one or more roads may pass，but no more，in all like－ lihood．These opinions we have embraced af－ ter viewing the question in various bearings， and time will test the correctress of our de－ ductions．
Boston，Concord and Montreal Rallroad． We understand from the Belknap（N．H．） Gazette that contracts are about to be closed for extending this railroad to Warren Village， 69 miles from Concord，and that the work of grading will be commenced in a few days． That between West Rumney and Warren，is estimated at only 225,000 cubic yards of earth excavation and embankment，costing about $\$ 25,000$ ，or a little more than $\$ 3,000$ per mile． The masonry is estimated at about $\$ 3,200$ ． It is not likely to exceed $\$ 4,000$ per mile to prepare the road for the track．The original estimate of this eight miles of the road，as sur－ veyed by Mr．Crocker，was about $\$ 170,000$ ，or about $\$ 142,000$ more than the present line is to cost．

Pennsylvania and Ohio Raliroad． The Pittsburgh Gazette informs us that a corps of engineers were expected to arrive in that city，to begin immediately the locating of the railroad from Pittsburgh to Beaver， which is to be ready for contract on the first of January next．It will then be immediately put under contract，if the amount of subscrip－ tions warrantit．

The people of Henderson，Kentucky，are en－ deavoring to start a road to Nashville， 130 miles．The West and South West are be－ coming sensibly awakened to the benefits of railroads．
The rails for the Hudson River Railroad are being laid down in this city．We are glad te see this；it will be a great accommodation to thousands of our working people．
The Oneida River，in this State，which runs from Oneida Lake to Oswego，has been im－ proved，and a new communication is opened for boats from Oneida Lake to Ontario．
Mr．N．A．Austin，of Ashtabula Co．，Oh has made a cheese which weighs 2000 lbs ．

## IMPROVED WOOD TURNING LATHE．－－－Fig． 1.



This improvement on wood turning lathes， is the invention of Junius S．Alcott，of Oriskany Falls，N．Y．，and for which he has made appli－ cation for a patent．Fig． 1 is a perspective view，and fig． 2 is a transverse section，show－ ing the end of the tool stock and slide that are hid in fig． 1 ．The nature of this invention is to turn a piece of wood in such a way that dif－ ferent sections of it will be of different shapes －such as one round，another oval，another square，\＆c．，by a pattern，but with a longitu－ dinal sliding cutter．A is the uprights of the frame to sustain the live and dead centres．M is the pully to drive the live centre in its bear

ing，$L ; B$ is the front sleeper of the rail on which the slide moves．$C$ is theirregular pat－ tern，which guides the tool，the handle of which is E ，having two flanges，with holes in them，through which projects two set of screws， K K ，placed apart and that rest on the surface of C ，which must be formed to guide the han－ dle to turn the pattern described．The pat－ tern can be elevated or lowered，and so can the slide on the other side，to turn large and small－

This is a plan view of a new Dog for Planing ；and are loosened or made fast by the nut han－ machines，particularly adapted to the Daniels＇dles，K K．On the under side of the plate，B， Machine，invented by Messrs．Joseph Adams are recesses for the dogs，E E E，to slide snug－ \＆Son，Hadley，Hampshire Co．，Mass．A is ly in and out．These dogs have racks on their the bed piece upon which the plate，B，can be inner ends，into which are geared pinions，D D secured by clamps，J J，which catch below，$\quad \mathrm{D}$ ，which act upon the racks by the levers，F
er kinds of wood work．$S$ is the chisel on the handle，$E$ ，and $F$ ，is a piece of wood，just to represent how it is placed in the lathe．$G$ is the inner end of the tool or chisel lever，con－ nected to the handle by the arch，seen under and around the wood．The particular patr of this lever，is that the end，$G$ ，is fixed on a joint，which allows the tool to rise vertically and also tohave a longitudinal roll motion，so as to make the knife cut deepinto the wood，ac－ cording as it is guided by the pattern rail in descending．$D$ is the tool stock fitted on a slide to move from the right to the left end，on rails in the common way．
In fig． $2, \mathrm{~J}$ ，the set screw slides on a rail and N represents the other side． HH are two roughing off knives to cut the wood to a right size to pass through the die．These two knives can be changed in position by an eccentric， which is operated by the screw rod，P P．I is what is termed the feeding knife，which is set vertically，projecting outward from the face of the die（the opening through which the stick， $F$ ，passes．）This knife has its edge cutting in a spiral direction，and draws forward the too stock to the wood to be turned．All the knives can be set in various positions，in a mostbeau－ tiful manner．All the parts are made strong， and its good qualities are apparent－the best of testimony to its practical working can be produced．Persons who may wish to buy can be furnished them at $\$ 25$ each，by directing to this office．


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F F，to＂move the dogs，E，in and out，thus to hold boards，HHH，of various lengths．－ Each pinion，$D$ ，has a separate axis，which moves in slightly elevated bearing boxes，C C C．This apparatus is very suitable for ma－ chines in the planing of boards of various lengths and for any number of such，at one time．S S S are set screws to retain the dogs firmly，when they are set．P P are two small metal strips，that are screwed down on the plate to retain under them，a cloth that will cover the gearing of the pinions and racks，al－ lowing the levers only to project through holes cut in the same．This is to keep out the chips dust，\＆c．This apparatus is very convenient and useful，and the inventors have taken mea－ sures to secure it by patent．

## Nastull 筷ereintis．

## Glazes for Pottery．

There are three kinds of glazes used in Staf－ fordshire，England－one for the common pipe clay ware，another for the finer kind，and a third for the ornamental kind．The common glaze is composed of fifty－three parts white lead，sixteen parts Cornish stone，thirty－six of ground flints，four of flint glass．These com－ positions are ground with water into a thin paste．Another is twenty parts of flint glass， six of flints，two of nitre，and one of borax． This is mixed tagether，and twenty parts of it are ground with twenty－six parts of feldspar， twenty of white lead，six of ground flint，four of chalk，nine of oxyde of tin and a small quantity of the oxide of cobalt．
Another glaze consists of twenty parts of flint glass，six of flints，two of nitre，one of borax．These must be calcined together，and to twelve parts of it add forty parts of white lead，thirty－six of feld－spar，eight of flints，six of fint glass，then grind the whole together into a paste．These substances make a glaze which is not easily acted upon by vegetable cids，and is very hard．The oxide of tin and borax is said to produce a good common glaze， not dangerous like lead for cooking vessels．In glazing earthenware the smallest possible quan－ tity of lead should be used，but a glaze can be made of ground glass and borax to answer any purpose，for what is a glaze but a glass sur： face．

## Camomile．

A few roots of this plant should have a place in every garden．Not only are its me－ dical qualities highly valuable，butits presence among vegetables is supposed to be an Egis of protection against many diseases to which they are subject．It should be transplanted into warm and rich soil，early in the spring，and be assisted，during its early development，by co－ pious manuring and frequent pressure．When plants，late in the season，exhibit symptoms of decay or general debility，the planting of a small root of camomile in their vicinage is fre－ quently the most speedy and efficacious remedy that can be applied．The odor，or a roma，dif－ fused by this plant，is also known to be highly repellent to many kinds of aligerous insects， and its presence among those species of plants and vegetables infested by such enemies，will protect them more effectually than almost any other agent known，and at comparatively small expense．

To Purify Rees Wax
Place the wax in a tin vessel，with small holes pierced in its bottom，and place it into an oven of the stove，or other oven，over a ves－ sel of water．The wax will melt by the steam
and drop down into the water below．This is also a good plan to purify glue．

