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## poetry．

## MOUNTAIN STREAMS

What time the fern puts forth its rings， What time the early throstle sings， I love to fly the murky town， And tread the moorlands bare and brown； From greenest level of the glens To barest summit of the Bens， To trace the torrents where they flow， Serene or brawling，fierce or slow， To linger pleased，and loiter long， A silent listener to their song．

Farewell，ye streets！Again I＇ll sit On crags to watch the shadows flit ； To list the buzzing of the bee， Or branches waving like a sea； To hear far off the cuckoo＇s note， Or lark＇s clear carol high afoat， And find a joy in every sound Of air，the water，or the ground； Of fancies full，though fixing nought， And thinking－heedless of my thought．

Farewell！and in the teeth of care I＇ll breathe the buxom mountain air， Feed vision upon dyes and hues That from the hill－top interfuse． White rocks and lichens born of spray， Dark heather tufts and mosses grey， Green grass，blue sky，and boulders brown， With amber waters glistening down， And early flowers，blue，white and pink， That fringe with beauty all the brink．
Farewell．ye streets！Beneath an arch Of drooping birch，or feathery larch， Or mountain ash，that o＇er it bends， I＇ll watch some streamlet as it wends： Some brook whose tune its course betrays， Whose verdure dogs its hidden ways－ Verdure of trees and bloom of flowers， And music fresher than the showers， Soft－dripping where the tendrils twine， And all its beauty shall be mine．
Ay，mine to bring me joy and health， And endless store of mental wealth－ Wealth ever given to hearts that warm To loveliness of sound and form， And that can see in nature＇s face A hope，a beauty，and a grace－ That in the city or the woods， In thoroughfares or solitudes， Can live therr life at nature＇s call， Despising nothing，loving all．
Sweet streams．that over summits leap， Or fair in rock－hewn basins sleep， That foaming burst in bright cascades Or toy with cowslips in the shades， That shout till earth and sky grow mute， Or tinkle lowly as a lute，
That sing a song of lusty joy， Or murmur like a love－lorn boy， That creep or fall，that flow or run－ I doat upou you every one．

For many a day of calm delight， And hour of pleasure stol＇n from night， For morning freshness joy of noon， And beauty rising with the moon； For fancres fair and waking dreams－ I love je all，ye mountain streams．

## OSCILLATING ENGINE．

Figure 1.


This kind of Engine is now becoming gen－ eral．The difference between the oscillating and reciprocating engine lies in the accom－ modation of the former to the motion of the crank by the cylinder being fixed to oscillate upon trunnions and thereby obviate，as will be observed，some gearing，they being more simple in the piston head connection．The objections against these engines have been the want of a sufficiently rapid escape of used steam and also their inability to apply the cut off，as may be desired to use the steam expan－ ively，yet this objection is but one of degree， for while the crank is passing the centres the steam port in the cyliader is contracted and the piston is moving the slowest while the steam continues passing into the pipes $G$ G，un－ til there is an equilibrium of pressure be－ tween these pipes and the boller，and during the quicker parts of the stroke the steam acts expansively on the piston，the admission into the steam chest being contracted by the par－ tial closing of the valve C．Where fuel is plenty ard cheap and the working of steam expansively would be of but little saving， this kind of engine from its simplicity will be found to be cheap，snug and durable．The first person who constructed an oscillating en－ gine，is said to be Mr．Rennie of London．It is a kind of engine that is coming into general use in England and a few have been erected here．It is then an object of some interest to our mechanics，and accordingly we present two views of Biram＇s patent，Fig． 1 an end elevation when the engine is at halfstroke or the greatest angle of oscillation，and Fig． 2 an end elevation when the crank is upon the centre．The same letters refer to like parts on both figures．S，fig．2，（so：newhat blurred in the engraving）at the downward pointed arrow，is the steam pipe．$E$ ，is the eduction pipe，and $C$ ，the slide valve．$D$ ，is a rod for moving the slide valve by means of $E$ ，a

## Remarkable Calculation

A Mr．Abraham Hagaman，of Brighton， Monroe county，New York，performs multi－ plications of twelve places of figures，by twelve places，by the mental process alone， or，in his head，as the phrase is．Mr．H．has given his attention mostly to mathematical studies for more than thirty years，in solving abstruse and difficult questions in the various branches of mathematics，though it was but very recently that he commenced his mental operations．Having not long since seen pub－ lished an account of a remarkable boy，in Vermont，who，it is said，could multiply five
hand lever attached the rod．G G，are the pipes forming the communications with the corresponding divisions of the two steam chests．H H，are steam ports on each side of the cylinder forming a passage for the steam between the tops of the trunnions and bottom of the cylinder，each of full half the usua） area of steam ports．These communicate al－ ternately with each section of the steam chests by the oscillating motion of the cylinder，and if constructed according to the proportions in the engravings would be open equal to the area of the ports when the piston rod had moved one－third of its angular distance from the centre．The trunnions should be made to fit truly into corresponding sockets in the steam chest which form also the support of the cylinder．The steam chests are screwed on to bearings of metal or timber，and they should be made se as to be secured or tighten－ ed up from time to time upon the trunnions to preserve them steam tight as they wear．－ The arrows show the direction in which the steam would move when the handle and valve are in the position shown in Fig．1．The sup－ ply of steam would be reduced，or c！it off， and the engine thereby eased or stopped by placing the handle more perpendicular and the direction of the engine would be reversed by inclining the handle towards the position of $F$ ．Generally to start the engine，it is only necessary to incline the handle one way or other，and to stop by placingit perpendicular， and this allows them to ie set in motion and stopped at will，some distance from the engine by lengthening the rod D ，making it very well adapted for working of mines．A fly wheel should be balanced to overcome the weight of the crank and neutralize the tendency of the engine to rest upon the bottom centre， whence it could not be started without the fly being set in motion first．
places of figures by five places，induced Mr ． H．to try his mental powers：the result o which is seen in part above．

In Western Virginia，it is advertised that a man of family，who will move on，can have 60 acres of land ior nothing．The settler to have the privilege of buying from the owner one hundred or more acres adjoining at one dollar per acre，payable in two three and four years．
At Norfolk a company has been formed to distill alcohol from tomatoes．The plan has been tested．

## RAIL ROAD NEWS．

Sunday Disasters．
If any person will take the trouble to ob． serve strictly the great proportion of acci－ dents that occur on Sunday in proportion to the number that occur on other days of the week，he will become thoruughly convinced of a moral government of the universe for the benefit of the workingman．On last Sunday beek quite a number of fatal accidents occur－ week quite a number of fatal accidents occur－－
red on the railroads between Albany and Buf－ falo，where Sunday travelling is ailowed．－ Two men were killed by the collision of a passenger and freight train between Schenec－ tady and Utica on the 30th April，and on that day between Utica and Buffalo，four different engines ran off the track．It is time the en－ gineers and other hands on all the railroads had one day of rest in the seven，as well as other working people．

Air hine Rallroad．
Various plans are on foot to defeat the con－ struction of this Rail Road，chartered by the State of Connecticut，to construct a road near－ ly in an air line from New Haven through Middletown to Boston．The Legislature of Rhode Island，refused the right of way through a correr of that State，which may compel the ＂air line＂to crook a little around the corner of Rhode Island，making the distance some four or five miles more than the straight route．The distance from New York to Bos－ ton by this＂air lıne＂Railroad is 211 miles， or 217 ，if compelled to a void Rhode Island．

Ohio and Pennsyivania Rallroad．
Active measures are now instituted to car－ ry out the project of this Railroad．The cit：－ zens of Pittsburg have subscribed liberally and the Pennsylvanians are determined if pos－ sible not to let New York engross all the car－ rying trade of the West．

The citizens of Cleveland，Ohio，have au－ horised by an almost unanimous vote，the ubscription of $\$ 100,000$ to the stock of the Pittsburgh and Cleveland Railroad．

The Boston and Lowell Railroad Company have determined to reduce their fares，on and after the 1st of June，to fifty cents between Boston and Lowell and to corresponding rate for less distances．

## Irish Einglne．

The largest steam engine ever made in Ire． land，was recently shipped at Belfast for the Pacha of Egypt．It is one of a number to be erected on the banks o！the Nile for pumping water to irrigate the land．The cylinder is 62 inches diameter，with a ten foot stroke； and the pump will throw up 10,000 gallons of water every minute．

## Mob Rockets．

We notice in the English Press that the greatest activity is manifested in the depart－ ments at Woolwich，in preparing rockets of a peculiar description，suitable to street war－ fare．These destructive missiles，when thrown amongst a mass of persons in confined places，are certain to produce the most fright－ ful results．We understand that they are be－ ing prepared to meet the outbreak in Ireland， and a great quantity that are completed，will be shipped off for that country immediately ； the same specimen of rocket was used with earful effect in the recent Carlist contest in Spain．

Glass bottles are made with great rapidity． A workman，with the assistance of a gather－ er and a blower，will begin and finish one hundred and twenty dozen quart bottles in ten hours．This is two and a half perminute In some establishments，the hands are restric－ ted to two per minute，to prevent slighting
the work． the work．

