Scientifa Amerifan.


## New Inwentions.

An Auxilifary Anchor.
Mr. John Holmes, of Holmes' Hole, Mar tha's Vineyard, has projected an auxilliary anchor to be used in cases of great danger, when the anchors of vessels may be dragging. We have seen a drawing of it, which is now at the office of the Union Mutual Insurance Co. Wall street, this city. It appeare to us that if adopted aud used by all vessels, it would be the means of saving hundreds of lives every year. It is to be made of cast iron, with a turtle shaped back on which are two standards with clasp eyes which are to be clasped round the cable and to slide gradually down along it by the pitching of the vessel. The under part of it is flat with a spring fluke, which projects on the point and holdslike the fluke of any other anchor. To seafaring men the nature of this invention is apparent, and as the inventor is a person long and intimately acquainted with the danger of a ves sel's being on a lee shore and dragging her an chors, it is to be hoped for the sake of huma nity, that it will arrest the attention of Under writers. We believe that measures have been takento secure a patent.

## New Cannon.

At the Empire Works of this City there is at present a new kind of cannon being constructed, which is a novelty inits way.
" It is lighter: and stronger than any ordnance yet in use, can be made of any size and power, for harbor and fortress defence, and has, withal, the virtue most needeed in Mexico-it can be carried anywhere that man can get, up and over the highest moun tains and most rugged passes. It is made of plates and bolts, in such a marner that a tweive or a hundred pounder can be taken a part, packed on mules or men's backs to the desired spot, and in fifteen minutes be p together for certain and deadly purposes.'

## biachine for Cuting Sales.

Mr. C. D. Bigelow, of Marlbore, Mass., has invented a machine for cutting out soles for boots and shoes of every size ând shape. The soles are cut out with the holes for pegs all punched, so that the peg awl will be entirely dispensed with, if some airangement can be made to punch the inner' sole. 'This will be a machine of great benefit to boot and shoe manufacturers and we believe it can be got up at but little expense, as it is very simple The inventor we are informed has taken mea sures to secure a patent.

## Lath Machine.

A rachine for splitting laths, the invention of Mr. Winslow of Cincinnati, has been pu into operation in Southwark, Pa. It is the firstof the kind put up east of the Alleghanies and has surprised the good mechanics of Phildelphia.

A huge $\log$, is placed in the machine, and by the means of two knives, one working per pendicularly, and the other horizontally, the laths are cut from the side of the log whic is pushed around by the machinery, so that the laths are of a unfform thickness and
width. It is driven by steam power and width. It is driven by steam power and minute.

Machine for Turasing Irreguiar Surface
We learn by the Gardiner, Me, Fountain, that Mr. W. M. Davis of that town has invented a new and important machine. for turning Lasts, Gunstocks, or any other irreg ular form. This machine is a great improve ment on M: Blanchard's old machine, and it will be a great public advantage, coming as it will, in competition with the old machine used for the same purpose. This machine is simple in its construction, entirely superseding the necessity of using one last to form another by.

## Jow Hemp Brake

The Louisville Journal and the Maysrille Herald, Ky., are diligently calling attention to the importance of Western manufactures, and the developement of the resources of the valley of the Mississippi. By the latter paper we learn that Dr. Levitt has lately invented and put in operation in that place, a new Hemp Brake, which breaks unrotted hemp, and which the Herald thinks is destined to bring about at once a great and mest important revolution in the hemp business of the West. The editor has seen it at work for hours, and pronounces it a wonderful machine, breaking and cleaning at the rate of 2800 pounds of hemp in 24 hours. Dr Levitt is a gentleman of a veiy inventive mind, and has devoted all his thoughts and labor for the last three years to the subject of breaking and spinning of hemp. In the prosecution of his investigations he visited England, Scotland and İreland and for a thorough knowledge of the whole subject he is sard not to be surpassed by any man living.


This is a very ingenious instrument, inverted by Richard Coffin, of Haverhill, Mass., and the following explanation will convey ar idea of its uses.
$A$, is the foot. $D$, is the frame. $C$, is a rod and crank attached to the augur H. B, is the cup and head. E, is the spring. G G, are wo rods forthe purpose of disconnecting the catches $F F$, from the rod $C$.
If you wish to bore, pull the spring $E$ tiy the handle to the left; shove down the left hand rod G, to disconnect the left hand from the rod C. The right hand catch holds the spring and throws itspower towards the augur H, and so on; the cup E allows its balls to roll in the frame and augur in any position and the thumb screw will hold it in that position; the other thumb screw is to hold the slide which elevates or depresses the augur. Measures are in progress to secure a patent.

## Electric Light.

We learn from the Buffalo Commercial Advertiser, that Mr. B. Adams, of that city, has discovered a method of producing permanent light from electricity. It is made from metals, and within aglass vase. The battery is of such a nature as to keep up a constant fluw of electricity. If all the proportions are ight and the material used is as large as can be obtained within a glass vase one foot in diameter, the light, placed in a suitable posstion, will be seen for miles around. The intensity of the light is said to be such that one will light the city as perfectly as day light. The whole apparatus for making a light of this magnitude will not occupy three feet square. It can also be made on a small scale for churches, and dwelling.houses, The expenise is stated to be very trifing, compared with that of any other light. Mr. Adams has already applied for a patent.

## Selfradjinsting Car-Shackie.

Mr. Dr. R. Pratt, of Worcester, Mass., has invented a new self-adjusting car coupling which, the Telegraph says, is so constructed that two cars run together for the purpose of being shackled must of necessity become so, without the aid of any person, as the iron ink for connecting the cars inserts itsel surely and firmly within the glapple. The invention also includes an attachment by which any part of the train may be instantly unshackied from any car while in motion.
Wc have seen a number of inventions lately for thie purfose, but we are not aware of
any of them being in actual use superseding the old links, although some of them we consider to be superior, and others that we have
seen instead of being new and useful in. proveseen instead of being new
ments, were the reverse.

## An Electric Gun.

The following account from the pen of J. R. Nichols, Esq. of Haverhill, Mass., describing a machine which he has invented, and which we have seen noticed in some of our exchanges, will be read with much interest by all our subscribers, as they are all interes. ted in scientific matter and as one wrote unto us last week from Ohio, "Ever since I became a subscriber to the Scientific American I have gone on steadily increasing in desire for scientific knowledge, and I look into the Post Office every. Saturday night hungry ior my weekly scientific repast." Mr wichole says :-
"I have placed together $\mathrm{tw}_{0}$ plates of metal of a circular form sixinches in diameter and separated about one inch from each other. This space is partially occupied by six metallic cylinders or barrels about three inches in length and one in diameter. These all rest very nearly against the centre of the plates, their mouths terminating at equal distances from each other. The plates and cylinders thus arranged are firmly rivetted together and the whole made to revolve in a vertical position. Through one of the plates and of each barrel at the breech, is a screw, through which passes two short pieces of wire insulated from each other and joined at the ends by a fine piece ot platinum wire. These wires protrude from the plate and are so arranged that while the machine is revolving they come in contact with the poles of a small magnetic battery. The machine is moved by the power of a revolving armature engine. The power thus derived is hardly adequate to produce the desired effect with certaints, and I have substituted inachinery somewhat similar to clock-work.
A tube is fixed over the machine in which is placed a charge of gun cotton pressed upon by a leaden ball; over that ball is another charge of cotton with a bail; in this way the tube 18 filled. By means of a slide at the bottom, a charge of coiton with a ball is let into each barrel when in a vertical position, and the barrel is discharged immediately at any elevation, by the bright metallic surfaces of the wires coming in contact with the poles of the battery. The guan cotton explodes at a temperature of 360 F . The explosion is certain, as the passage of a current the platina wire from a very feeble battery instantly produces a much higher temperature than that.
This is a very imperfect description of a very simple contrivance. It has seemed to me of late that a machine of a similar character might be constructed which would prove terribly destructive as an engine of war.
There are quite a number of objections to the machine I have described, but 1 intend to pursue the subject and make such alterations and improvements as may occur to me.
J. K. Nichols.
[It was at our request that Mr. Nichols furnished us with the foregoing description of his invention, regarding the merits of which he expresses humself in a very modest and ur assuming manner.

## New Rope Machine

Mr. J. Morrison, of Harrisburg, Pa, has invented a new machine for making rope.We have been informed that the space occupied wisth it for making tow lines and bale ropes will not exceed 8 feet square, and for $2 \frac{1}{2}$ inch rope he estimates that a room is 20 feet square will be quite large enough.

Mr. Pethick of this city, has made some ve vimportant improvements in the construction of Pianos, tor which he is going to se cure a patent in England.

## Nice Balanctug.

In describing the Philadelphia Mint, the North American says:-" We saw a pair or large scales, bailt of Gothic grold, which are in hourly use in weighing lets of five dollar pieces, turned palpably by a piece of fine let ter paper, not so big as a dime."


## LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT office,
For the week ending $F$ eb 8, 1848. To Lewis Tupper, of Genoa, N. Y.. for iza provement in machines To Daniel P .
To Daniel R. Pratt, of Worcester, Mass, for improvernent in drawing rolls for spinning machinery. Patented Feb. 8, 1818.
To Solyman Merrick, of Springfield, Mass. for improvement in Revolving Spring Punch Patented Feb. 8, 1848.
To John Barker, of Baltimore, Md., for for improvement in air heating Furnaces. Patented Feb. 8, 1848.
To William Baker, of Utica, N. Y., for im provement in Sash Fasteners. Patented Feb. , 1848.
To Rufus Nutting, 2d., of Romeo, Michigan, for improvement in Piano Organs. Pa ented Feb. 8, 1848.
To George S. Bosworth, of Boston, Mass., for improvement in Cooking Stoves. Patented tb. 8, 1848.
To William De Haven and William Um holtz, of Minersville, Pa., for improvement in Coal Breakers. Patented Feb. 8, 1848.
To William E. Maginnis, of Philadelphia, Pa., for improvement in Ladies Corded Skirts Patented Feb. 8, 1848.
T• William Rogers, of Philadelphia, Pa for improvement in moulding Hollow Ware Patented Fet. 8, 1848.

## INVENTOR'S C\&AIMIS. <br> Spinning Machine.

By Matthew W. Obenchain, of Springfield, Ohiv. Improvement in machinery for spinning Patented 11th September, 1547. Claim -What I claim as my invention and desire to secure by letters patent is, First, giving to the first set of draw rollers an intermittent motion in combination with the second and third sets of draw-rollers made with segments to draw alternately, and substantially as described. Second, I claim giving to the series of guide rollers an intermittent reciprocating motion to take up the slack of the roving, and thea to give it out, substantially as described, in combination with the intermittent motion o the first set of draw-rollers as described. And I also claim in combination with this, giving to the guide rollers an intermittent rotary motion to prevent the breakiags of the rovings by friction as described. And finally I claim hanging the third set of draw rollers in a sliding frame, substantially as described, provided with the most reqisite mechanical agent for moving it during the operation of spinning, whether this be rack or pinion, or other mechanical equivalent whereby the amount of twist to be given to the threads that are being crawn and spun between the roll ers, can be regulated at pleasure by the atten dast as described.

Carriage Boilles.
Ey Charles 1. Woolson of Cleveland, Ohio Improvement in hanging carriage bodies. Pa tented 11th September, and dated 1.1 th March 1847. Claim.-What I claim as my invention and wish to secure by letters patent, is connecting the "cradle spring" (so called) or the single steel spring, similar in form to the half of an elliptic, to the forward axle of carriages or wagons, as poists near the hub, so as to ha vethe spring form the rocker and turn with the axle, and transfer the weight from the middle to the ends. of the axles, as described, when this is combined with the body of the carriage by means of the fifth wheel attached to the spring as described.

The Santa Fe Republican of November 13, says that the potatoe grows wild in the mountains near that place.

