# New Inventions.

Machine for Employing the Water-Power of Rivers.

Mr. Joseph Hardie, of Victoria, Texas, has taken measures to secure a patent for new ma chinery to be submerged in rivers where there is a current, however small, so as to propel machinery on shore by the power of the water. Tidal wheels are old and well known, but very few of them have been employed in our country, and they are not adapted for many of our rivers. What a power there is in the Mississippi river, and yet it flows on to the Gulf of Florida, without applying its giant strength to move—so far as we know—asingle mill. A machine to apply this power safely and economically is a desideratum: Mr. Hardie has applied his inventive powers to do so. His water motor is submerged, and is connected with a framework on the bank of the river, which can be elevated or lowered by capstan or windlas, according to the height of the

#### Electro-Magnetic Fire Alarm.

Mr. Henry Van 'Ausdell, of Eaton, Ohio, writes to us saying he has invented a Burglar's Electro Magnetic Fire Alarm, which is peculiar in a number of particulars. It is of such a nature that any number of houses may be embraced in a circuit, and when one is being injured by fire or entered by burglars, the "a)arm" is given at any or all the others, and in such a manner that they can know in a moment the precise point of disturbance; its construction is simple, it consists of a series of doors and windows, which, when broken, releases clock-work, driving a signal wheeleoperating on the key of the other circuit, &c.

#### Improvement in Carriage Springs.

Mr. Gustavus L. Haussknecht, of New Haven, Conn., has made an improvement in springs for carriages by employing a combination of the C and the semi-eliptic springs, positioned transversely with the axle, the lower the upper part, or inner extremity of the semieliptic spring. A flexible band is also attachtop of it. The point of attachment or support of the carriage body, in relation to the combined spring, is asserted to be such as to insure great strength and flexibility. The inventor has applied for a patent.

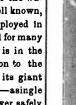
## Improved Pump.

Mr. Thomas Ling, of Saratoga Springs, N. Y., has taken measures to secure a patent for an improvemnt in pumps, which is worthy of attention. He employs a water vessel or case named a "Surety Box," situated beneath the plungers, to prevent any leakage of air around the pistons. It is well known that if any air gets under the plungers, the suction, as it is commonly termed, is destroyed, this improvement is to obviate that evil.

### Machine for Printing Oil Cloth.

Mr. Simeon Savage, at the Lowell Machine Shop, has succeeded in the invention of a machine for printing floor cloth, which promises to be of great utility in the manufacture of this most desirable of floor coverings. We will not attempt any description of the construction of this machine, as no patent has yet been obtained for it, although one will be applied for as soon as a model can be built. This machine is capable of printing 2,000 yards of floor cloth per day, in eight different colors at the same time, and by the same principles, twenty colors could be as readily printed. We saw a specimen of floor cloth printed by it, which warranted us in the belief that more perfect goods can be made by this machine, which is worked by power than style of ornamental bricks, which has recent-oak, rose, satin, or other woods, or sculptures reviving, for certainly they appear to us well can be made by hand .. - [Lowell Courier.

### Gold Hunters.



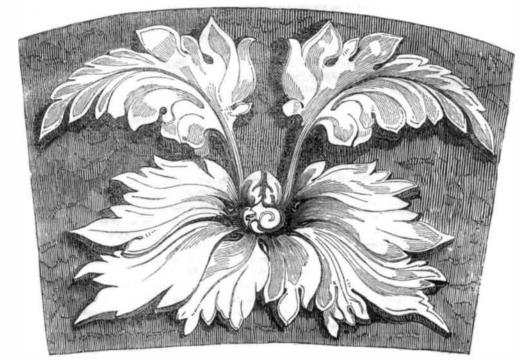
two or more circuits (operated by the same have yet seen of the Great Exhibition Build- ticles, the great mass of them, very attractive wards of an hour in the American section, battery), one of which is closed by closing ing, Hyde Park, at least to convey a good idea so far as show is concerned. This has been a the Queen expressed to Mr. Riddle the pleas-

may be obtained.

The above engraving is the best view we been sent there to be exhibited, nor are the ar- to touch the goods !" After remaining upof its vast extent. We do not intend to say fine subject to make a handle of, by Jules Ja- ure she had received in her visit. anything about the building itself here, such nin, the celebrated French letter writer, a roy- In agricultural implements, America sur-

as its dimensions &c., for by reference to No. alist wool-dyed and hater of republicanism; passes all the other nations there, but Great 31 all the information required in this respect it has also furnished a file for the London Britain, and stands equal with her. This is Times to sharpen its teeth with, but for all gratifying, yea, more, exhilirating, for agri-The London correspondence which we have this, we neither feel shame, fear, nor melancho- culture is the mother of all arts, and the true published every week since the beginning of ly, all will come out right at last. Our com- thermometer of a nation's solid comforts. Curilast April, has given our readers a vast missioner, Mr. Riddle, has written a letter to ous visitors, and the journalists who are geneamount of information respecting many of the the Hon. J. C.G. Kennedy informing him that rally mere literati, without any knowledge of articles, &c., therein exhibited. We will only the Queen and Prince Albert had visited the the arts, or machinery, do not appear to take part of the spring being attached to the axle, say a few words about the American depart- American Department, and had made a care- much interest in the American department. partment of the exhibition. A very large ful examination with great apparent satis. The Illustrated London News and the Morning space was allotted to our country in anticipa- faction. Mr. Riddle described the principal Chronicle are exceptions. The contrast betion of a very great number of exhibitors from articles, and her Majesty took in her hand tween the plain articles from the United States ed to the C spring, and made to pass over the the United States. This space is not ade- some of them, although placards at every step and the glittering display of other nations is so quately filled up by the articles which have informed her that "Visitors are requested not great, that both critics and visitors make a

### ORNAMENTAL BRICKS.



discovered in Somerset county, in that State. They can be painted and grained with the ut- en years ago; how they came to be disused private individual.

The accompanying engraving represents a | most facility, so as to imitate any kind of | we cannot tell, but we think they are worth ly been introduced into England, and patented in stone, or be gilded without injuring the adapted for ornamental architectural purposes, by Messrs. Bowers, Challinors & Wooliscraft, | brilliancy of the gold leaf. They may supply | both inside and out, such as for internal and of the Staffordshire Potteries. These bricks, the place of wood carving in architectural de- external decorations of churches, public build-We see it stated that hundreds of men are or rather they are a kind of pottery ware, are coration, and, from their fire-proof nature, add ings, mansions, houses, and shops, cornices, leaving the towns of Gardiner, Hallowell, Pitt- made from a mixture of clay and other ingre- to the safety of the buildings. Some orna- mouldings, skirting boards, to match in design ston, acc, in Maine, for the gold mines lately dients, calculated to vitrify with the clay. mental bricks were employed in this city about any style of architecture, or the taste of any

hasty survey of our bales of cotton, barrels of | that many of the best machines of our coun- | favorably with those of other nations. The flour, and agricultural implements. Occasion- try would yet be sent to the exhibition." ally groups of intelligent examiners may be

taking notes and consulting together. "The committee appointed to report on the del of our Dry Docks, which he acknowledged United States were able to compare favorably service. with Great Britain; and he expressed a hope | Philadelphialamps and chandeliers compare | houses in the world."

A great fuss is now being made about a fire annihilator which is to render fire companies One of our contemporaries says "it is an Eng- been too highly flattered by far. lish invention and has been strongly recommended by many principal officers in the Royal Navy and well-informed commanders in the merchant service; and Lord Brougham recently said that he hoped before long no vessel would be allowed to put to sea without having some of these machines on board. It is a little singular that an invention which is selfish partiality: everything is strictly consaid to rank in value with that of the steamboat, fidential—and our motto is "small profits but nicated a very simple method of preventing of the patent office, which will be furnished on has never been introduced here, if it be as valuable as asserted. It would certainly be imment, and are enabled to invite more appliable as soon as dry, sprinkling the wall with a patent granted to him on the 26th of Dehas never been introduced here, if it be as valmediately adopted, if it were discovered to poscants for patents to consider the advantages a saturated solution of alum. He states that

Transcript, gives it a most astonishing characcification, with its drawings, is like a bill—a ter, such a one indeed, as would lead us to legal document—they will see that it requires suppose that one of the fire annihilators, to be carefully drawn up and correctly execuabout the size of a pail, would extinguish a ted. If a man will have a patent, let it be lation on page 299, we made a mistake in the 12 o'clock M.; and all persons are notified to fire annihilator is the invention of a Mr. Phiare surrendered and re-issued at a vast exlips, in London, and was patented by him pense, owing to originally bad specifications. nity of Boston, there is a school and dwelling sons opposing said extension are required to about three years ago. We noticed it on pree it is better to have no patent at all, than one house in the course of erection, which are be-237, Vol. 4, Scientific American. The appathat is defective in any one point. We are ing built to carry out his system; he would fically set forth in writing, at least twenty ratus is only a device to generate, choke damp, very careful in preparing documents so as to (carbonic acid gas) suddenly so as to put out meet all future contingencies. the flame. The principle of the invention is old and well known. It is simply a means whereby some sulphuric asid may be poured pon moist chalk or powdered marble to gene- cation of "Hibbard's process of tanning." | warming the air. He could instruct by let-

reasons why in No. 37, page 293.

the department of machinery, he said that the workmanship, and eminently adapted for real much excellence as to be willing to vie in the nished on application.

The splendid engraving of the Interior of the

The above engraving cost, to import, over

\$150, and the impressions taken from it have

The external appearance of the industrial

huilding represented in this week's number

and the best and most correct view published,

Ruttan's System of Ventilation.

not injured it in the least.

ate the gas, and let it get among the flames. It is an appartus that may be very useful to keep in dwellings, but it never can supercede Great Exhibition Building, London, measuruseless and lay our firemen on the upper shelf our fire engines, and in London it has failed ing 194 by 134 inches, and printed in No. 31, of inglorious repose. Our daily papers have to accomplish on a large scale that which it present volume of the Scientific American, been flaming for a few weeks past with won- it seemed capable of doing on a small scale. will be sold at the low price of \$25 upon apderful accounts of its extraordinary powers. It would be very useful on ships, but it has plication at this office.

### Patents.

During the past year our patent business has increased very rapidly; this is owing to the promptness with which we attended to our business, and the care we exercised to see that will also be sold to match the Interior View, it was well done. We take no personal intequick returns." We have lately engaged additional assistance in our draughting depart.

of a lather of soan and hot water, and then

On the petition of John Thomas, of Plain-

### Tanning Notice.

come to New York and personally superintend its completion. This is a generous and manly offer, and exhibits the confidence Mr. Ruttan has in the superiority of his invention. The ventilator illustrated on the page referred to, is for burning wood, but it could be made to burn coal just as well by adding a coal grate. One of these apparatus may be seen in Boston, No. 11 Franklin street. Application for Extensions of Patents. U. S. PATENT OFFICE.

ter any person how to put up the building un-

til the floors were laid down, when he would

On the petition of John and Charles Hanson, of England, praying for an extension of a patent granted to Benjamin Tatham, jr., and H. B. Tatham, as assignees of the said Hansons, on the 29th of March, 1841, for an improvement in making pipes or tubes of lead, for seven years from the expiration of said patent, which takes place on the 31st day of August, 1851. It is ordered that said petition be heard at the Patent Office on Monday, the 18th day of August, 1851, at 12 o'clock, M.; and all persons are notified to appear and show cause why said petition ought not to be granted. Persons opposing the extension are required to file in the Patent Office their objections, specifically set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

On the petition of Reuben Daniels, of Woodstock, Vermont, praying for the extension of a patent granted to him October 7th, 1837, for an improvement in shearing machines, for seven Morning Chronicle says:—"The casting is years from the expiration of said patent, This is true, America is not represented remarkable for its fineness, sharpness, and which takes place on the 7th day of October, seen standing around some particular article, at the great exhibition. We have given our uniformity. The branches formed by ara- A. D. 1851. It is ordered that the said petibesque scrolls, profusely ornamented with birds tion be heard at the Patent Office on Monday, The American carriages at the exhibition and flowers, delicately sculptured or in bold the 15th day of September, 1851, at 12 o'clock department of machinery recently made a care- are unrivalled for lightness, strength, and sim- relief, with centres of richly cut glass, claim M.; and all persons are notified to appear ful examination of several of our machines; ple elegance, this is admitted on all hands. particular approval for their elegance and and show cause, if any they have, why said Mr. Brunnel, one of the committee, expressed his astonishment that the Americans had not Robbins & Lawrence, of Vermont, are justforwarded to the exhibition a greater variety ly pronounced by Englishmen as among the ted States, it being scarcely fifteen years since the Patent Office their objections, specifically of valuable inventions, as he knew that we best, if not the best, of any rifles in the world. every chandelier, girandole, mantle lamp, and set forth in writing, at least twenty days bepossessed a great number. He mentioned par- The critic of the Chronicle says they are of an candelabra used in that country was imported fore the day of hearing; all testimony filed by ticularly that we had neglected to send a mo- unpretending style, but are remarkable for a from Europe; and it argues considerable en- either party to be used at the said hearing plain, substantial, and perfect finish; that terprise and perseverance on the part of the must be taken and transmitted in accordance were not surpassed by any in the world. In they are strong, simple, and thorough in their manufacturers, that they have attained so with the rules of the office, which will be furexhibition with the oldest and most celebrated

On the petition of Richard Imlay, of Philadelphia, Pennsylvania, praying for the extension of a patent granted to him on the 21st September, 1837, for an improvement in the modeof supporting bodies of railroad cars, &c., for seven years from the expiration of said patent, which takes place on the 21st September, 1851. It is ordered that the said petition be heard at the Patent Office, on Monday, the 1st day of September, 1851, at 12 c'clock M.; and all persons are notified to appear and show cause, if any they have, why said petition should not to be granted. Persons opposing the extension are required to file in the Patent Office their objections, specifically set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules

This is sensible, but we see that a G. Q.

Colton, writing from New York to the Boston

Transcript, gives it a most astonishing character of the state of the same day of December, 1851. It is ordered that the said petition be heard at the Patent Office on In describing Mr. Ruttan's system of venti- Monday the 24th day of November, 1851, at seventy-four gun ship in a twinkling. This well done—a good one. Every week patents name. The name of the inventor is Henry appear and show cause, if any they have, why ling erected in New York to carry out his sys- filed by either party to be used at the said tem; he would be willing to devote his time hearing must be taken and transmitted in acand personal expenses, the owner merely pay- cordance with the rules of the office, which

THOS. EWBANK, Com. of Patents.

Next week we shall publish the full specifi- ing for the workmanship and machinery for will be furnished on application.

EXTERIOR VIEW OF THE GI IBITION BUILDING