

## New Inventions.

## Improved Blowing Machine.

Mr. Solomon W. Ruggles of Hartford, Conn., has invented and taken measures to secure a very good improvement in Blowing Machines. The blades of the blower are made with side flanges and concave or shovel faces, and above the circle box in which the fan revolves, there is a circular chamber between the roof of the fan box and the outside casing. From the fan box to this chamber there are a succession of leading spouts or ways branching off at tangents from the circle box. When the fan revolves, the air is driven rapidly into the circular chamber spoken of, out of the fan chamber, through the ways spoken of, thus preventing the air from accumulating with a back pressure on the fan blades, and consequently obviating the side lapping of the air on the back of the blades. The air passes from the outer chamber to the forge or fire. This blower has been tried in the place of one of the old kind, and its performance has astonished all those who are acquainted with its action, and the action of the blower it has supplanted.

## Patent Troubles—Friction Matches.

"A good many years ago," say the Springfield, (Mass.) Republican, "A. D. Phillips, then of this town, secured Letters Patent on the invention of friction matches. The patent, however, came to be regarded as a dead letter, and everybody made and sold friction matches, in any quantity. Recently, the patent has been assigned to some Boston gentlemen, and they have given issue to demands upon manufacturers and vendors, in this State, and these demands have been, in some cases, paid. Individuals in Springfield, who have sold friction matches, have, under a threat of suit for damages forked over \$25 each, that being the sum uniformly demanded of traders, as a compensation for their infringement.

An action has been commenced against H. E. Pierce, a manufacturer of matches in Charlemon, in the U. S. Circuit Court, at Boston, which will be tried in January. In the meantime, the Court has issued a temporary injunction upon his manufacture. The action is brought by E. Bryan and others, and they are probably the assignees of Mr. Phillips' patent. We understand that it will be shown, in defence, that the friction match was the simultaneous invention of quite a number of individuals, one of whom, at least is now a resident of Springfield. Such, at any rate, is said to be the fact, but we are not enough conversant with patent laws to decide upon its weight in such a case as this.

Matches have now become one of the necessities of life, and the exaction of tribute for their sale would be a tax as universally felt as a direct tax on bread. Their manufacture, not only for domestic use, but for export, has become an important branch of business in many parts of the country. An enormous quantity are manufactured in New York."

The following letter relates to this patent:

PATENT OFFICE, Jan. 6th, 1851.

GENTLEMEN—Agreeably to your request of the 3rd inst., I have to inform you that the patent issued to A. D. Phillips, on the 24th Oct., 1836, was extended to his administrator, E. T. Swift, seven years from the 24th Oct. 1850. No Re-issue was granted. I am, respectfully, yours, &c., THOS. EW BANK.  
Messrs. Munn & Co.

## Extension of Patents Applied for.

FIGURE LOOM.—Edson Fessendon, conservator of the person and property of William Crompton, a lunatic, in Hartford, late of Taunton, Mass., has applied for the extension of a patent granted to the said Crompton, for an improvement on figure power looms. The patent expires on the 25th of next November.

This petition will be heard at the Patent Office on the 24th of next March, at 12 M. All persons opposed to the extension must appear and show cause why it should not be granted.

FIRE ARMS.—O. W. Whittier, of Concord, N. H., has petitioned for the extension of his

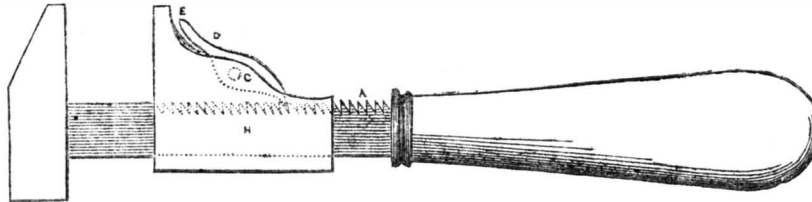
patent, granted 30th May, 1837, for an improvement on Fire Arms. This petition will be heard at the Patent Office on the 17th of next March at 12 M.

## Successful Result of Arsenic in the Case of Pleuro-Pneumonia.

As we hear still of several losing their cattle from distemper, many being ignorant of, or afraid to adopt the remedy which Mr. Shepard has kindly made known through the columns of your paper, I take the liberty, according to my promise, of giving the details pursued by my steward in one of the worst cases which I have seen. On perceiving the first symptoms, he bled the cow until signs of exhaustion were apparent; then administered

twelve grains of arsenic in a little soft sugar, at intervals of three hours, washing the mouth occasionally with nitric acid, and also the hoofs, from which there was a great running. After the expiration of forty-eight hours, he made her swallow about a pint of oatmeal gruel, and on the following day he gave a mash of boiled turnips and beans, continuing these mashes for about a week, when she was able to eat some cut grass, and soon after became perfectly well. I may mention, as it is not generally known, that both pigs and poultry are liable to catch this disease, so that caution should be observed in removing the bedding of affected animals out of their reach. —[Farmers' Gazette, England.]

## NEW WRENCH.

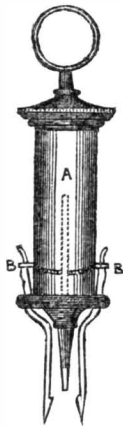


The accompanying engraving represents a wrench, with an improvement on it made by J. W. Hargrave, of Lowell, N. C. It requires but little description, as it will at once be understood by all who look upon it. Instead of a screw upon the shank, and a thread inside of the under jaw working on it, there are ratchet

teeth, A, in the front of the shank, and there is a pall, D, on the under jaw, E, which moves on a centre-pin, C, with a spring under it to keep the pall in the rack. This constitutes the improvement; it is easily and quickly changed for large or small nut, and on the whole, appears to us in a very favorable light.

## Ear Syringe.

Some time ago we noticed, in a cotemporary, a letter from a correspondent, stating that he was relieved from temporary deafness by inserting a pair of very small iron tongs into the orifice of his ear, and then gently expanding the legs of them. This was practised regularly every morning for two weeks. This view is a syringe, having two levers or forceps, which can be brought very close together at the points. These are inserted into the entrance of the orifice of the ear, and then by pressing upon the lever, A, seen by dotted lines, the legs, B B, expand, and open the orifice of the ear. The bent levers are fixed on



centre pins at the lower flange of the cylinder, consequently, by pressing the short ends inwards, the outer prongs expand. Any substance for washing the ears may be used, such as cold weak soap suds. The ear is a member which should be very gently dealt with. It is not prudent to use any hot solution for cleansing the ear.

## Mineral Riches of Arkansas.

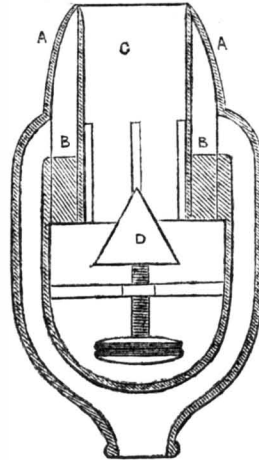
A Mr. Snell, an accomplished chemist and mineralogist, who has lately been exploring the mineralogical treasures of Arkansas, says he found in the interior and mountainous regions of the state abundant indications of mineral and metallic wealth. He collected a large number of specimens of silver, iron, lead, copper and zinc, and he reports having seen indications that some of these metals exist in great quantities, and that veins may be worked with much advantage. He also discovered signs of extensive coal beds, the strata in some places being quite thick, and the quality of the coal is said to be similar to that of Pittsburg, and equal to it in combustibility and calorific power.

Twenty-five sail of vessels are now due at this port from Europe. The weather has been very severe.

## New Gas Burner.

This is an improved Gas Burner, recently patented in England by George Michiels, of London. The quantity of gas issuing from the burner is increased or diminished at pleasure. The gas issues in the form of a circular ring, and not a series of apertures as usual. The means of regulating the quantity of atmospheric air is provided for, and is admitted into the interior of the flame.

The accompanying engraving is a representation of the burner. A is the exterior of it; at the upper part it is circular in form, and at



the lower part cylindrical; the outer part is soldered to the ring, B, and the inner to C of the burner which is cylindrical and which is also attached to the ring, B, by means of a fine threaded screw, so that it can be raised or depressed, and thereby cause the upper edge of the inner cylindrical part to approach to or recede from the upper edge of the outer part, A. The inner part, C, can be raised or lowered by means of a key. The cone, D, can be raised or lowered by means of a screw, to which it is attached, passing through a bridge fixed to the stem of the burner, so as to adjust and regulate the quantity of atmospheric air admitted to the interior of the burner. This is allowed to be a very important consideration as a good light—complete combustion of the gas—depends on a requisite supply of atmospheric air to the burner, so as to supply, if possible, the interior of the flame. It was upon this principle that Bude made his first experiments and great improvements.

The celebrated vase, in the gallery of the Vatican at Rome, supposed to be that containing the ashes of the sons of Germanicus—some say of Augustus—was recently thrown from its pedestal, by the falling of a window, driven in by a fierce gale.

## Post Office Statistics.

We are indebted to W. V. Brady, Esq., P. M., for the accompanying Post Office statistics for the quarter ending Dec. 31st, 1850:—

California Letters received,	123,912
Foreign do. do.	340,402
California do. sent,	127,048
Foreign do. do.	353,454
Total,	944,816

To this add the daily average of domestic correspondence, of say 50,000 letters, and the amount of letters received and sent by transient vessels, and it will give 6,037,000 letters that have passed through this office in the last quarter.

The number of Foreign Newspapers for the quarter is as follows:—Received 169,233 and sent 316,068, amounting to 495,301.

The amount of letters advertised in the quarter, was 37,942, one-third of which have been called for and delivered to the rightful owners.

From the above statement our readers can form some idea of the vast amount of business done regularly through the New York Post Office.

## Statistics of New York.

The total number of vessels at present on the stocks, or launched during the year, was 77, whose aggregate tonnage is 89,741; of this amount, 62,225 tons have been launched, and 27,216 tons remain to be launched.—Nineteen of these vessels are steamships, 24 steamboats, 3 propellers, 28 ships, 4 schooners, and 9 ferry boats.

The number of new buildings erected during the year 1850 was 1,912.

The deaths including still-born, were 16,954, a ratio of 1 to 32.50.

The arrival of emigrants for the year was 234,620, of which 220,788 were aliens, and 13,832 citizens from foreign ports.

There were 2,705 convicted of various crimes. There are 4,741 persons in various offices.

## The African Exploring Expedition.

We have received intelligence from the Saharan African Expedition up to the 29th of August last.

The expedition had literally fought its way up to Selonfeet in Aheer, near to the territory of the Kailouee Prince, En-Nour, to whom it is recommended.

Mr. Richardson had been obliged to ransom his life and those of his fellow travellers twice. The whole of the population of the Northern districts of Aheer had been raised against the expedition, joined by all the bandits and robbers who infest that region of the Sahara.

The travellers are now in comparative security. It has been a tremendous undertaking for them to force their way among tribes who had never seen the face of a Christian, and who look upon Christians as the declared enemies of God.

The great Soudan route, from Ghat to Aheer, is now explored.—[London Times.]

## Eclipses for 1851.

There will be four eclipses in 1851,—two of the sun and two of the moon. A partial eclipse of the moon, on the 17th of January will be invisible on this continent. An annular eclipse of the sun on the 1st of February, invisible in North America, but central and vertical in the Indian Ocean, near the Isle of Java. A partial eclipse of the moon, on the 18th of July, visible throughout the United States; first contact with shadow, 1 o'clock, 6 min.; middle of eclipse, 2 o'clock, 35 min.; last contact with shadow, 4 o'clock, 8 min.; meantime, morn; magnitude of eclipse, 8 2-5 digits on moon's southern limb. A total eclipse of the sun, on the 28th July, partially visible. This eclipse will be total at Baffin's Bay, Labrador, a part of Greenland, and in the Atlantic Ocean, east of Newfoundland.

## Improvements in London.

Improvements are to be made to a considerable extent in the city of London. Furnaces and fire-places, used in manufactures, are to be compelled to consume their own smoke,—nuisances are to be removed, and part of the area around St. Paul's to be laid into the public thoroughfare.