NEW INVENTIONS.

Balance Gate.

Mr. C. Van Hoesen, of Leeds, Green Co., N. Y., has taken measures to secure a patent for an improved balance gate, which may be opened and closed by the driver of a vehicle, without the necessity of leaving his seat. The gate is hung on pivots, the said pivots passing through its two sides and through the gate posts. One of the side pieces of the gate extends upwards some distance above the pivot, and has a weight or counterpoise upon it that causes the gate to be balanced upon the pivots. The gate is provided with two latches, which are operated upon by the ropes or cords passing over a semi or half pulley attached to the longest of the two side pieces, and at a point about where the pivot is placed; the cords pass over small pulleys fixed in horizontal arms attached to upright posts—an arm being on each side of the gate. The horizontal arms are sufficiently elevated to allow the driver to catch the end of the rope as the vehicle approaches the gate, and on pulling the rope, the latches of the gate being balanced by the weight or counterpoise before mentioned, the emi-pulley spoken of will turn, and the gate will arise, and one of the latches will fasten itself (when the gate is in a horizontal position) in a catch attached to a horizontal arm in one of the gate posts. When the vehicle has passed through the gate, the driver pulls the rope which is on the opposite side to that which he entered, when the latch will be relieved from the catch in the horizontal arm mentioned, and the gate then descends to the original position—is closed.

Improved Friction Clutch.

Mr. Gerard Sickles, of Brooklyn, N. Y., has taken measures to secure a patent for an improvement on friction clutches, which consists in a peculiar manner of operating two segments, by which operation they are made to bind in a V shaped collar, or be freed from it, as desired. The binding of the segments in the collar transmits motion to certain parts of machinery to which the clutch may be applied, or stops the motion of said machinery by freeing the segments from the collar spoken of. The segments are operated by means of levers having arms attached to them, the arms being also attached to boxes in which the said segments are placed. These arms and levers are so arranged that when the said segments are pressed in the collar they will not relax their connection—as common clutches are liable to do—without the application of extraneous force. This clutch prevents jarring when it gears with the machinery—a most important improvement.

Improved Brick Machine

Mr. R. A. Vervalen, of Haverstraw, Rockland Co., N. Y., has taken measures to secure a patent for improvments in presses for making bricks. He employs a lever which acts like a cut-off in steam engines and produces a greater or less pressure of the followers upon the clay as may be desired. He employs a spring so arranged upon the machine that obstructing substances, such as stones in the clay, will be prevented from breaking the working parts or front plate of the press, which latter may be removed at pleasure.—The improvements made are of great importance to brick makers.

India Rubber Power.

On page 133, this present volume Scientific American, we published an engraving of the "India Rubber Power Accumulator" of Mr. Hodge, of England. Mr. J. S. Livingston, of Micanopy, Florida, informs us that he suggested the same invention for a similar purpose more than three years ago, namely, the use of it for getting vessels off a beach, but he never once thought of getting a patent. That Mr. Livingston and Mr. Hodge invented the same thing, unknown to one another, there can be no doubt in our minds. It frequently happens that two, three, and more persons make a similar invention at the same time, all unknown to one another. The man who first embodies the mental creation and makes it operate, is held to be the inventor, but no more, we take it, than what he has deloped in his machine. At the present moment there are three interferences declared in the Patent Office for the same invention. Viewing things in this light, our readers will see how reasonable and just the views are which we entertain respecting the Telegraph Decision which we have discussed on another page.

Cast-Iron Car Wheels.

Mr. Stephen Thurston, of Scranton, Pa., has taken measures to secure a patent for an improved cast-iron wheel. The wheel has a single plate of a peculiar form, which connects the hub and rim, and is believed to be well adapted to stand the shrinkage in cooling when cast, and to stand the shocks which all wheels are subject to when running. The plate of the wheel has a double series of radial corrugations on it, united by a hollow band or single circular corrugation.

Turner's Improvements in Paper Making.

On page 166, in our List of Claims, there is one for improvements in making and sizing paper, granted to Geo. William Turner, of London. Since the American patent was issued we have examined the specification and drawings of the same, and we believe it to be a very excellent improvement. Unless it was considered a valuable improvement in the art, the inventor never would have paid $500 for the American patent fee.

WALLS' QUARTZ CRUSHER.

Figure 1.

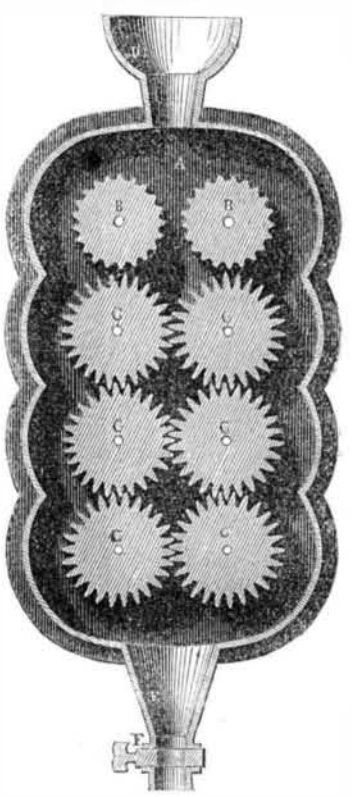
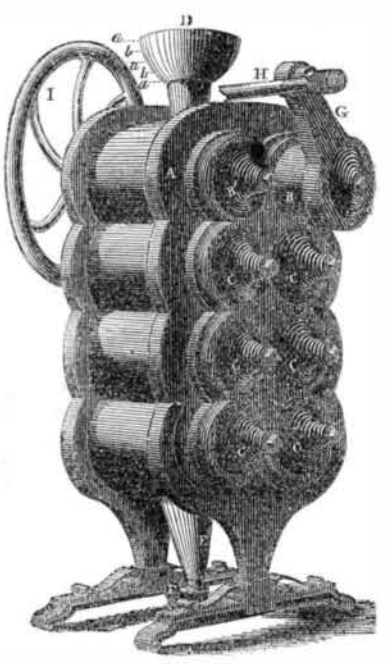


Figure 2.



The accompanying engravings represent the improved machinery invented for crushing quartz and other metallic inorganic formations, by Mr. Charles R. M. Wall. No. 44 Oliver st., this city (New York), who has applied for a patent for the same. Figure 1 is a vertical section taken through the middle of fig. 2, which is a perspective view. The same letters refer to like parts. A is the metal box; it has two sides, which have bearings for the journals of the crushing rollers, C C, C C, C C, and B B. There are recesses cast in the outsides of the box, A, and the journals of the rollers huve screws cut on the ends of their outside, on which are secured caps—seen in figure 2—in the inside of which is placed oiled stuffing fitted around the axle, so as to make the journals work perfectly water-tight in their bearings. The box is made perfectly water-tight. There is a division plate on both sides of the crushing rollers, and between the outer sides of the box, and these divisions —one division on each side—separate large pinions on the axles of the rollers from the rollers themselves. Each roller axis has a large pinion on it; these pinions are not seen, but they mesh into one another. D is a funnel; E is the outlet channel; F is a cock to close and open the outlet passages; H is the lever or handle of the driving crank, G. I is a fly-wheel. The quartz is admitted through the funnel, D, which is filled up with water to the top. This water exerts a great pressure—in accordance with the height of the column, and of the advantages of this, we have received strong assurances from those who have seen the machine operate; the italic letters, *a b, a b a*, represent the quantity of ore ground. For example, when, by opening the cock, F, the water in the funnel falls from *a* to *b*, then this indicates that one ton has beon ground; when it is drawn from *b*, to the second, *a*, then this indicates, that half a ton has passed out of the machine, and so on for the next. Each ton of quartz requires about forty-five gallons of water which is discharged at intervals from the cock beneath, in the consistency of mortar. Owing to the pressure of the water in every direction, it may be said, the specific gravity of the quartz, and the rollers is reduced, in action, according to the quantity of water employed; the lower rollers being deepest in the water, work easiest on their journals, therefore they do not wear out so fast, and there is also less friction. While the quartz is reduced at each revolution of the rollers, it is compressed and collected to the centre line to yield to the pressure of the rollers as it descends. Each roller makes a revolution in two seconds; the two upper ones being the most open receive the rough quartz and reduce it to small pieces, which are all pulverized to powder before they reach the bottom. A two horse-power machine will crush 1440 lbs., of quartz in one hour. The opening at the top rollers is calculated for pieces of from 2 to 3 inches in diameter. A fifteen horse power engine will reduce, in a large machine, pieces from eight to ten inches in diameter with great rapidity. This machine is not liable to get out of order. The rollers are of chilled cast-iron, and the whole cost is not great.

More information may be obtained by letter addressed to Mr. Wall.

Pseudoscope.

Prof. Wheatstone has recently invented a curious optical instrument named as above. It gives false conceptions to all existing objects; it makes the nearest points seem furthest off, and *vice versa*. A solid globe seems to be concave; the inside of a tea-cup seems like the rounded side of a projecting solid. A bust looks like a hollow mask; a framed picture on the wall looks, as it were, let into a wall, and the general objects on a wall as if placed behind it.

Escutcheon for Locks.

Mr. George Sommers, of Newark, N. J., has taken measures to secure a patent for an improvement in escutcheons for locks, by which he dispenses with the labor of cutting mortices and holes in trunks for the mechanism on the backs of the ordinary escutcheons, to make them fit snugly.

Wonderful Discovery---To Preserve Organized Specimens.

Messrs. Editors—Permit me to bring to your notice a process discovered by a citizen of this place, by which animal or vegetable matter (i. e. plants or flowers) may be preserved for any length of time: I have seen specimens of fish, reptiles, &c., beautifully preserved, which had been exposed, purposely, in an open building for more than fifteen years. In this variable climate a thorough test. Human subjects appear, after the same length of time, as if but recently dead. There is no shrinking or discoloration of the features—nothing revolting in their appearance, as in the Egyptian mummy. There is nothing removed—brains, entrails, all are suffered to remain intact. But the most extraordinary feature of the process remains to be told:—a few drops of the fluid, administered in the food or drink of birds or animals, increasing the dose gradually, will, in a few days, not only destroy life, but also effectually preserve the subject from the ravages of time or insects, worms, &c., and this is all that is necessary, either for a mouse or an elephant. Bodies have been preserved by it after decomposition or putrefaction had actually commenced.

The discoverer, a respectable German physician, who is more familiar with retorts and crucibles than he is with the English language, is anxious to place himself in communication with some responsible party who would either purchase or make some arrangement advantageous to both.

W. H. Shecut, M. D.

Charleston, S. C., Feb. 3, 1852.

[This is the announcement of a most wonderful discovery—valuable beyond computation. Every person who writes to Dr. Shecut on the subject, should pay their postage. A number of people write for information who do not act right in this respect.—[Ed.

Preserved Meats.

At Portsmouth, Eng., a great deal of naval stores of preserved meats have been condemned. They were found to be totally unfit for use, putrified and abominable. Thousands of canisters had to be thrown into the sea. This was beautiful work for inspectors of meat in the British Navy. The British Admiralty would do well to purchase the patent of Mr. Gail Borden, for making meat biscuit. This would be a great blessing to the British navy. They never would be troubled with bad preserved meats. It seems that the meats spoken of were purchased abroad, and the British Naval Commissary has been cheated most shamefully. The British Government should remember that the meat biscuit took a Council Medal at the Great Exhibition, We hope that the British Admiralty will pay attention to this.

The contractor for the Admiralty was a Jew named Goldner, who had the contract for supplying the Admiralty for six years. There were 8,660 cannisters: they cost about a million of dollars. What wretched officers there must have been at Gosport. This Goldner, it seems, lives in Hanover. If Napoleon or Wellington had to do with such a fellow, they would soon make him face the triangles.

The Woodworth Patent.

The Committee of Patents have under consideration the petition for the extension of this patent by Act of Congress for 14 years more after December 1856. If the patent be extended it will be the grant of a monopoly for 28 years. We do not consider the first 14 years of the patent while William Woodworth was alive. The patent was granted in 1828, and if extended now it will not expire till 1870—42 years from the time it was first granted. It is our humble opinion that the patents should not be extended, because it claims, as amended, more than was invented by the original patentee, and it has been the means of deeply injuring many inventors and others. This patent has made the fortune of a number of men who had no concern in the invention—men who could not invent a spatula. A patent should not be extended but to reward the inventor when he has not received sufficient remuneration for his invention. It is supposed that if this patent be again extended for 14 years, it will be worth seven million of dollars to the owners of it.