

NEW INVENTIONS.

Improvement in Water Closets.

Messrs. Daniel Ryan and John Flanagan, of this city, have taken measures to secure a patent for an improvement in Water Closets. It is well known that improvements in such apparatus are of great consequence, and therefore of no small value. The nature of the improvement consists in surrounding the upper part of the bowl seat with a chest or penstock into which the water from a supply pipe flows and discharges itself in a solid sheet around the conical sides of the seat, and flowing into and cleaning the pan at the bottom of the bowl seat. There are some other improvements of an excellent character, but we cannot render the subject so intelligible as we wish we could, without an engraving.

Cloth Measuring in Power Looms.

W. H. Woodworth, of Salmon Falls, N. H., has taken measures to secure a patent for measuring cloth as it is being woven in power looms. A spool of cords, tied together, of different colors, according to the length of the cuts of the web in the loom, is made to wind up on a bobbin, worked by the action of the loom as the cloth is being woven. The apparatus, with the cords, is very neat and small, and is secured underneath the breast beam. Thus, for example, a blue cord will indicate 40 yards for a cut, and when this cord is wound up on its barrel, and the next cord, which may be a red one, appears, it will let the weaver know exactly where to take off the cut. It is a better plan than to mark the warp, and is very simple. Part of this invention has been assigned to A. G. Haley, of Salmon Falls.

Coiling and Packing in Spinning.

Peter McKinlay, of Wappinger's Falls, Dutchess Co., N. Y., has taken measures to secure a patent for valuable improvements in coiling and packing the slivers and rovings of cotton, wool, flax, and other fibrous materials, during the operation of spinning. The improvements are four in number, but as we design to have the invention illustrated in our columns in a few weeks, we shall not describe its nature particularly at this time. The slivers can be packed in the cans or coiled around rods, or the slivers can be packed without any can at all; the rovings can also be taken away out of each can, when full, without the necessity of removing the can. This is an important advantage. The invention is of great moment to our manufacturers; the inventor stands high as a thorough and skillful man fully acquainted with all the defects and advantages of our present spinning machinery.

Improved Governor for Steam Engines.

John Tremper, of Buffalo, N. Y., has invented a very simple and beautiful improvement on Governors for steam engines. It can be made at a very small cost in comparison with the common governor. A vertical spindle receives motion from the main shaft; on this is placed a sliding collar, which is connected by a rod to the throttle valve. The slide, however, has no flexible arms attached to it, to elevate the rod by centrifugal action. The construction and operation are different in principle, entirely, from the common governors. Two straps are attached to the top of the spindle opposite one another, and the lower ends secured to balls on horizontal rigid arms, which are secured to the sliding collar. The straps partake in a moment of the motion of the spindle, and act upon the balls at once on the outer ends of the horizontal arms and lift up the sliding collar in an instant. The action of this governor is by velocity and gravity, the velocity of the spindle and the gravity of the sliding collar. A sudden increase of velocity in the spindle makes the cords of the arms wind around the top of the spindle, and this lifts the sliding collar instantly, when the steam is cut off, and then the gravity of the balls and collar, when the velocity of the spindle is thus checked, soon restores the cord to its angular rigidity. It is a unique system of checking and balancing for governing the quantity of steam required for the engine, so as to preserve a uniform motion of machinery. It is very excellent for grist and saw mills and factories. The inventor has taken measures to secure a patent.

Railroad Alarm.

D. C. Teller, of Cooperstown, Oswego, Co., N. Y., has taken measures to secure a patent for useful improvement in making an alarm on a locomotive, to warn the engineer of the approaching train, when it is one, two, or more miles distant, and coming on the same track. The nature of the invention consists in arranging and attaching a series of springs, wires, and levers to an ordinary railroad track, in such a manner that a locomotive in passing along the track will operate upon levers and

cause springs to be thrown out sufficiently far from the rails as to cause the said springs to act upon a rod attached to and extending down upon another locomotive running on the same track in an opposite direction. The rod is designed to operate, by wires or other means, the steam whistle or bell at the ear of the engineer. The invention is one which has arrested the attention of a number of engineers, and in many cases may be of great use for single tracks. A practical test of its merits, alone, can determine its utility.

BRONSON'S GOLD SEEKER.

Figure 1.

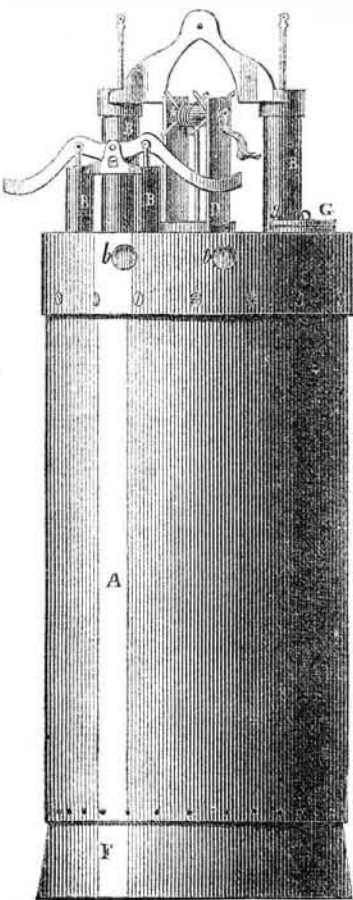
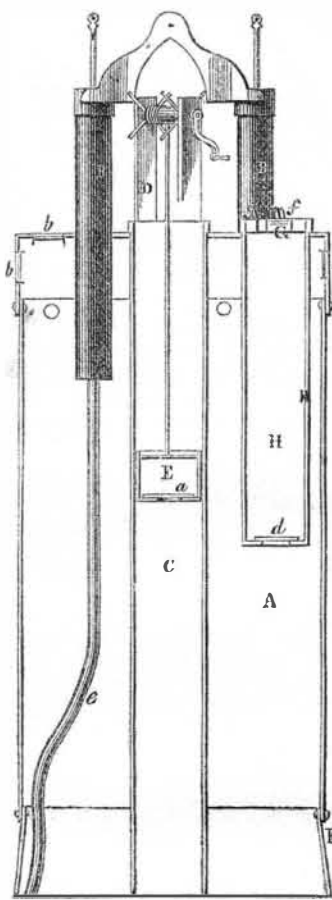


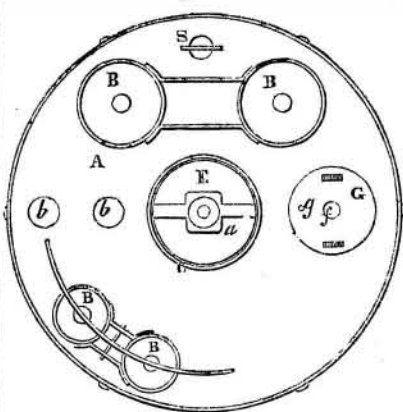
Figure 2.



The accompanying engravings are views of a machine invented by Abram Bronson, of North Fairfield, Huron Co., Ohio, for digging and seeking for gold in the beds of streams and rivers.

Figure 1 is an outside view of the machine; fig. 2 is a vertical section, taken through the middle of it, and fig. 3 is a plan view. The same letters of reference indicate like parts. The nature of this invention consists in displacing the water within a cylinder by means of atmospheric air forced and compressed within the cylinder by air pumps, by which arrangement, in connection with a draught tube, workmen may descend within the cylinder to the bottom of rivers and streams, and there remove and pass up depositions or parts of the river's bed, without permitting the air to escape from the cylinder.

FIG. 3.



There is also an entrance closet placed underneath a man-hole in the top of the cylinder, said closet being within the cylinder, and provided with a stop-cock, and also a door at the lower part; the closet being for the purpose of allowing the workmen to pass into and out of the cylinder without permitting the compressed air to escape.

A is a large tube, cylinder, or chamber, made of any material suitable for the purpose. B B are air-pumps on the top of the cylinder, for

the purpose of compressing air within it. C, fig. 2, is the draught passage or pipe, placed in the middle of the cylinder; this tube may be attached firmly to the upper part of the cylinder, or it may be attached in any flexible manner by means of india rubber, &c. By having the draught pipe flexibly attached, the lower end of it may be passed over the whole area enclosed by the bottom of cylinder A. Directly over the draught tube, C, there is placed a windlass, D, for the purpose of raising the bucket, E, which works within the draught tube. This bucket may have a valve, a, in its bottom. Suppose the apparatus to be sunk in a river, and its lower end resting on the bottom, it will at once be perceived that the pumps, B, can force and compress air in the inside of the cylinder, so as to prevent water from entering into it. The deposits are lifted in the draught-tube, C, and this tube acts as a cut-off for the air. The workman excavates the bed of the river that is encompassed by the cylinder, and places the deposits in the bucket, E, when it is drawn up by the windlass, D. The cylinder may be made of any required length by having it so constructed that section after section can be added to it. The lower section, F, is made somewhat bell-mouthed or flaring, and it thus forms a good base for the cylinder. The draught tube may also be formed in sections similar to that of a telescope. In the upper part of the cylinder there are lights, b b, made of strong glass. To the pump, B, there may be attached hose, e, as exhibited in fig. 2, for the purpose of conveying fresh air to the bottoms of the cylinder. When the apparatus rests on a clay bottom, no water will find ingress to the draught pipe. In that case there will be less pressure of air within the cylinder.

G is the man-hole on the top of the cylinder, A; immediately under it is the entrance closet, H. This closet is provided with a stop-cock, and it has a trap-door, d, on its lower end. The object of this closet is to allow the workmen to pass into and out of the cylinder without permitting the air to escape.

If the air should escape, the water would enter the cylinder, this would be a cause of trouble. The workmen, in passing out of the cylinder, enter the closet through the door, d they then close this door and the stop-cock, and emerge through the man-hole, G. q is a screw bolt to fasten the man-hole cap, and f is a light of glass placed in the centre of it; it is lifted by taking hold of the two lugs.

The apparatus may be sunk by means of weights attached to it, or in any other proper manner; it may also be placed between two scows, or passed down through a scow.

The above description of the engravings will render the construction and operation of this apparatus plain to all. The inventor has taken measures to secure a patent, and more information may be obtained by letter addressed to him at his residence.

The New York Crystal Palace.

The Managers of the New York Riddle's Fair have published a card, stating that \$200,000 were required to commence the project, and that \$184,200 have been subscribed. As we have already stated, the great object of the Exhibition is not the glory and honor of our common country, but the gain of the almighty dollar. The circular signed by Theodore Sedwick, President, and all the respectable managers, presents the profits to be made, as a most complete and forcible argument for subscribing for stock. They state that 9,720 visits, at 50 cents each, may be expected every day for 150 days. Let us quote the rest from the circular:

"The exhibition of the American Institute, usually held at Castle Garden, has three or four thousand visitors a day. It is surely not extravagant to estimate double the number for the Reservoir Square Building. Any way, therefore, this calculation will be found a safe one. Now look at the financial results:

1,458,000 visits, at 50 cts., is . . .	\$729,000
The estimated cost of the building is . . .	\$150,000
Contingent expenses of freight, insurance, and management . . .	100,000
Add for short estimate . . .	50,000
	300,000—300,000

Total \$129,000

Here are arguments for you: they are indeed worthy of stockjobbers, but not of those who would desire to have a World's Fair in our country, upon the same principle and capable of rivalling the London one. The gentlemen managers appear to have envied the money-making faculties of Mr. Barnum, but it will take them all pressed together to equal him in Museum Exhibitions. We certainly wish them all success, for we cannot wish failure and misfortune to any person or persons engaged in moral and lawful pursuits; and to them the object is no doubt a laudable one; to us, however, it is not. We had hoped to see a "World's Fair" in some part of our country in a few years hence, but this one, it is our opinion, will prevent it. The London Exhibition cost our country, one way or another, more than two millions of dollars, and we expected the people of Europe would, at some future day, return us the favor, as they no doubt would. Our New York Exhibition Managers have the glorious object in view of making a patriotic pocket full out of their own countrymen.

These are our views on the subject; it will make no difference with us whether the affair takes place or not; in fact we know the Exhibition will be a benefit to New York city, but we like to see good principles and noble actions characterizing every movement among our people.

Trial of Fire Engines.

We have received a letter from a correspondent, informing us of a trial which took place in Newark, N. J., on Thursday afternoon, the 17th inst., between two fire engines; the one, No. 2, being built in Newark by J. & L. Allen; and the other, No. 8, by James Smith, of New York. These are both pianos. They played into one another alternately for five minutes. No. 2 washed No. 8, and then kept clear of her water. No. 2 threw a horizontal stream 168 feet; No. 8 167 feet 5 inches. No. 3 is built with some improvements, —what they are he saith not.