

## New Inventions.

## New Respirator and Inhaler.

Mr. A. S. Lyman, now of this city, inventor of the Safety Steam and Water Gauge, which bears his name, has invented a beautiful instrument or apparatus, for inhaling medicated vapors by sick persons, and also to purify the atmosphere, which may be inhaled by any person. The latter quality of this neat apparatus will enable a person to go into, or labor in a deleterious atmosphere, without danger. A small cap-shaped reservoir of light material is fastened on the head with a neat tube secured to it, in such a manner that the wearer only inhales through it. This tube communicates with the atmosphere and with the small cap reservoir, which contains some purifying or disinfecting substance, such as moist lime, or fine charcoal, which absorbs impurities from the atmosphere, and allow the pure air only to be taken in by the lungs. It is well known to many, that if a clean silk handkerchief be tied around the nostrils in single fold, so that the wearer can respire through it, and expire by the mouth, he may, with impunity, for some time, stay in an unhealthy apartment or walk through pestilential marshes. The Indians of Florida and those of South America, who live in swampy Savannahs, always cover their mouths and nostrils loosely, with some part of their garments, when travelling at night or early in the day. They cannot give a reason for this custom, but it is either one of savage instinct or an old discovery rendered customary by tradition. Upon these principles of fact Mr. Lyman has constructed his Respirator, combining with it the advantages of mechanical science in its construction, and chemical science in the matters which he uses as purifying absorbents, to remove the deleterious gases that are mechanically combined with the atmosphere, to allow the pure air only to be inhaled, and also to enable a person to inhale medicated vapors, such as pure oxygen, for the purpose of curing disease. This neat apparatus is useful for the invalid, physician, chemist, dyer, bleacher, miner, traveller and mineralogist. Measures have been taken to secure a patent.

## New Water Filter, Cooler, Refrigerator and Meat Preserver.

Mr. Alfred W. Plattenburg, of Cincinnati, Ohio, has invented a very neat apparatus, which filters water, cools it, and by a very excellent arrangement and combination of parts, it embraces a fruit and meat preserver, which is kept always at as low a temperature as the freezing point; with a dry atmosphere, the very thing necessary for the perfect preservation of such articles. The water is filtered at the top of the apparatus, then passes around the cooler, easy of access, which is filled with a refrigeric mixture, and is drawn off by a faucet when wanted. It is constructed to let all the condensed moisture pass away below the apparatus—this being an imperative requirement for the good preservation of fruits, &c., that may be placed in the chamber below the cooler. It may be useful to a number of our readers at this time, to know what substances are best adapted, as non-conductors, to be placed between the division or double casing of Meat and Fruit preservers. All Ice houses, meat preservers, &c., should have double walls or casings filled with some non-conducting substance between. The cheapest and best non-conducting substances are dry saw dust, cork cut into minute pieces, or fine charcoal. Cork is the best, as it will not absorb moisture, but it is the most expensive.

The inventor of the above apparatus has taken measures to secure a patent.

## The New Art of Kerasophany.

A new art has been discovered in Berlin, which consists in making pictures of a material, the principal ingredient of which is wax, in imitation of transparent ones made in porcelain. To be seen, the picture must be placed between the observer and the light. The ingredients used with the wax destroy its brittleness and it withstands a heat of more than one hundred and fifty degrees Fahrenheit.

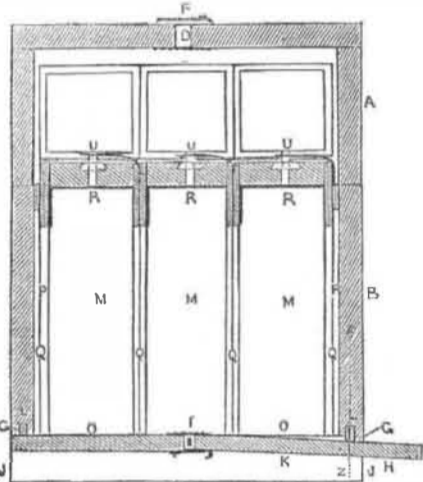
## Improved Machine for Setting up the Bows for Covers of Wagons and Carriages.

Mr. A. McKinney, of Montgomery, Orange Co., N. Y., has invented a very simple and good apparatus for setting up the bows for the covers of wagons and carriages, previous to trimming them. By the present method of setting up the bows, each is measured by rule, or set up by the eye, and this requires a great deal of time, and is very troublesome and expensive. By Mr. McKinney's machine one person will set the bows of a wagon in fifteen

minutes, and do it with the utmost accuracy, for there are setting rules that measure the height of the bows and there is an adjustable arc which, in a moment can be set to regulate the particular curve to set the bows for the cover, graduating it to the particular curve desired. This machine is a gauge for the object stated, and by it a great amount of time and trouble—consequently money, will be saved by it. The inventor has taken measures to secure a patent.

## THE ECLECTIC BEE HIVE.

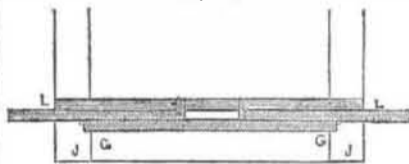
FIG. 1.



This is a recently patented improvement belonging to Mr. Clark Wheeler, of Little Valley, Cataraugus Co., N. Y. Fig. 1 is a vertical section, from front to rear through the centre. Fig. 4 is a transverse section on the dotted lines Z Z. Fig. 2 is a bottom perspective view of one of the honey drawers detached; figure 3 is a view of the pendant box; fig. 5 is an edge view of the lighting board. The same letters refer to like parts.

Fig. 1 consists of an external case, A B; H is the bottom board; M are pendant boxes; I and O are the drawers. The boxes and drawers are enclosed by the case, leaving a space, P, of about the fourth of an inch around for air, to prevent extremes of temperature. A is the upper section of the case, and is movable, to allow free access to the hive for any purpose desired. B is the lower section with two sides extending below, forming legs, H, the bottom board is inserted into horizontal grooves, G, formed in the extended sides of the case below the level of the lower edge of the front and back. This board serves for the bees to light upon, and has wedged shaped

FIG. 4.

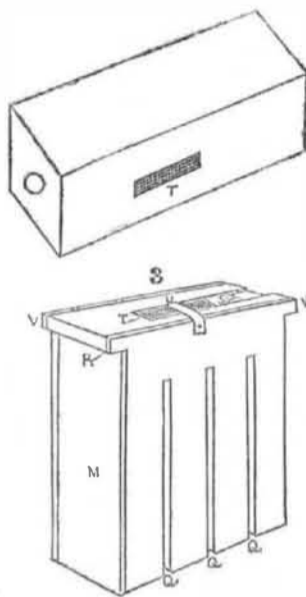


grooves, represented by K, fig. 5; it allows an entrance on both sides, and also for closing one or both, when desired. L L, figs. 1 and 4, are rectilinear bars, inserted through openings in the sides of the case, and moving in horizontal grooves in the lower edge, front and back of the case; they retain the bottom board in its place and they serve to graduate the space of ingress and egress. The pendant boxes, M, serve for the bees to store their winter's food, rear their young, &c. They are suspended in a vertical position inside of the section, B, by the projections, V V, fig. 3.—These boxes are open at the bottom to allow the free entrance of the bees and the descent of extraneous matter to the bottom board, and

## A New Discovery for Millers.

A discovery of a chemical nature which seems to awaken some interest at the West, has been made by a Mr. Carpenter, of Pontiac, Michigan, a practical miller, consisting of a process in preparing wheat for flouring; the operation of which is to cause the grain to pulverize so much more readily, that in grinding, consider-

FIG. 2.



then taken out at the entrance. They have also vertical slits, Q Q Q, which allow access to the bees from one box to the other. Communications, for well-known purposes, can be cut off from one box to the other, by bringing the solid portion of one opposite the open portion of the other. In these pendant boxes two swarms can thus easily be formed without disturbing their natural position, and on the approach of winter two small colonies may be united together by bringing the two boxes containing them into one hive. The horizontal slits, R R R, allow the Aparian to introduce a knife to sever the comb from the tops. The slide, S, is to open the aperture to allow the bees to pass into the drawers, U U U. The opening of the slide is covered by a wire cloth, T, which serves as a ventilator; U are straps for the purpose of lifting the boxes. The drawers are for the purpose of obtaining marketable honey free from impurities. The bees have access to these boxes by the rectangular slit seen in figure 2. The aperture, I, in the bottom, and the opening, D, through the top, serve to ventilate the hive, to be closed with a button, F. They are covered with wire cloth to prevent the entrance of enemies.

This hive affords ready communication for the bees through all its parts, and allows the graduating of its capacity at all times, corresponding with the number of its occupants. It enables a small as well as a large swarm to maintain its required temperature, to work their comb to advantage, mature their young and guard their domicile. Bees can be treated by the Aparian in the most convenient manner for health, and their prosperity in every respect. Protection is afforded against the ravages of the moth, and every facility is given for cleanliness, ventilation, handling, shifting and the prevention of robberies by the enemies of the bees. The Eclectic Hive, therefore, is a good one.

More information about rights, &c., may be obtained by letter (p. p.), addressed to Mr. Wheeler.

able less power or pressure of the mill stone is necessary in reducing it to the required fineness. Dr. Desnoyers, of Detroit, accompanying his report of an analysis of some flour made from wheat subjected to this process, says, "The gluten was very fine, being exceedingly tough and elastic qualities essential to successful panification."

## Manufacture of Iron.

"We should feel under renewed obligations to the Scientific American for an intelligible account of the lately trumpeted cheapening process in iron-making by which, from pulverized ore and coal, wrought iron is said to be made direct for \$25 per ton."—[Pottsville Mining Register.]

[We have not heard anything about this alleged discovery for some time. One thing we regret, viz., that the manufacture of such a useful metal as iron should be so troublesome and expensive. Iron is the most sensitive of all metals, hence the difficulty of its manufacture, and the variety of kinds produced by the same apparent treatment. Every improvement in the manufacture of iron is a valuable one, for no metal equals iron in the range of application.]

## Friction Match Case.

U. S. Circuit Court, before Judges Woodbury and Sprague. Ezekiel Byam et al vs. William Brooks.—This was a bill in equity for an injunction against Brooks to restrain him from manufacturing or selling friction matches. The court at a previous hearing granted a temporary injunction; now, after argument, made the injunction perpetual. Eben Smith, Jr., counsel for the complainants; Bancroft and Dickinson for the respondent.

[This must surely be a peculiar, not a common match.]

## Parker's Water Wheel.

The suits pending in the District Court of the United States against several of our saw mill owners, for an infringement upon the patent water wheel of Mr. Parker and upon which injunctions had been granted, and the mills stopped, have been compromised by a portion of the defendants, Messrs. Seitzinger, Wilson, Kessler, Bickel, and Ewing, with the patentee, on favorable terms, and the mills set going again.—[Pottsville Emporium.]

One of White's Gas Apparatus has arrived in this city from Liverpool, by which gas can be manufactured of resin and water, at a cost of about one dollar per thousand feet. The process is very simple, and the gas, when made, much purer than that of the Gas Companies of this city. We shall soon see what it can do in cheapness, we know what it can do in quality—it is good.

## Identification of Dr. Parkman's Body.

The Tribune says it is suggested by a very eminent Surgeon of this city, that in the trial of Dr. Webster, one of the most important, and, to a Chemist, most obvious processes for determining upon his guilt, has been entirely forgotten, or at least neglected. Admitting that the remains found in the College are Dr. Parkman's it is possible that they were placed in Dr. Webster's apartments during his absence, unless it can be shown that they were there subjected to fire—in which case the time consumed and the necessary disorder induced by the proceeding, would make his privacy and complicity unquestionable. This point could easily be settled by an analysis of the soot in the chimney, which would disclose recent deposits of the constituents of the human body if any had been burned in the grate within half a year.

[We do not believe that the shadow of a fact could be obtained by such an analysis, to determine either the guilt or innocence of Prof. Webster. Suppose that Dr. Webster had at one time, long ago, consumed parts of a human body, like Dr. Strong, and had not touched Dr. Parkman. What then? could any chemist tell what body the soot &c., belonged to? We trow not.]

## Camels for the Western Prairies.

Eleven Camels, from the Canary Islands, have recently been imported into Baltimore, and are destined for St. Louis, to test their capacity for crossing the western plains to Santa Fe and California. Whether they will be successful or not, we cannot tell, but we are of opinion that they will not answer the purpose at all. The climate is by far too cold in winter.

After all that we have said about the dirt in our streets, the corporation still glories in gutter.