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Rail Road News.

Mechanics' College in Boston.

It is said that two gentlemen in Boston, propose to open a scientific school for mechanics,—apprentices, journeymen and masters,—in which a regular course of lectures and lessons are to be given in Mecchanics, Drawing, Engineering, &c., with the ultimate design of establishing an institution of high order, exclusively for the instruction of mechanics in all those branches of science applicable to their occupations. This we consider to be a grand proposition, and hope that it will be successfully carried out. The object is a noble one, and would be of vast benefit to Boston. The only difficulty lies in getting the mechanics to sup port it.

Revolutions vs. Railway Speculations.

An English writer, in remarking upon the events of the two past years, says that in England, during that period, Government securities were deteriorated fifty per cent. more by railway speculations then by all the revolutions which convulsed Europe during the whole of the year 1849.

Ohio and Pennsylvania Railroad.

At the annual meeting of this Company held in Pittsburgh, on Thursday last, it was stated that the subscriptions to the stock of the road now exceed $1,000,000. Fifty miles have been put under contract, and the work is steadily progressing.

The gross receipts of she Connecticut River Railroad, in 1849, were $101,000—expenses, $95,000. The nett earnings of the Troy and Schenectady (N. Y.) Railroad, are not sufficient to pay the expense of running it. Mr. John Hyde, engineer of the Norwich and Worcester, Mass., Railroad, has run the New York steamboat train for seven years, and during the whole of that time has never had a wheel of his locomotive off the track.

The Montgomery Advertiser and Gazette of the 18th ult., learns that the freight train of the Georgia Railroad, broke through the bridge over Yellow River, at Madison, whereby it was precipitated to the depth of fifty feet, and all on board the cars were killed.

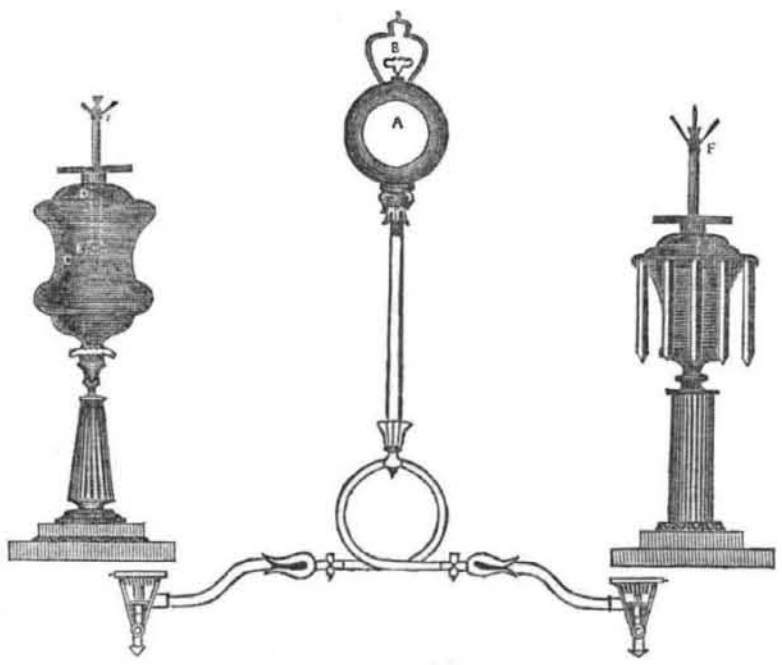
The citizens of Burlington, Vt., in a public meeting, passed resolutions requesting the Directors of the Central Railroad, to run its track from Winooski river to Lake Champlain, "through the ravine that divides the village of Burlington, whereby the proposed depots may be secured at or near the Square."

There are 431 miles of railroad in use, in Connecticut. There are 300 miles now in the course of construction, which when completed, will make 730 miles.

The Martinsburgh Gazette states that a serious accident occurred on the railroad, near Duffield's Depot lately, by which two or three burden cars were demolished, and the track much injured for some distance.

SPIRIT GAS LAMPS.

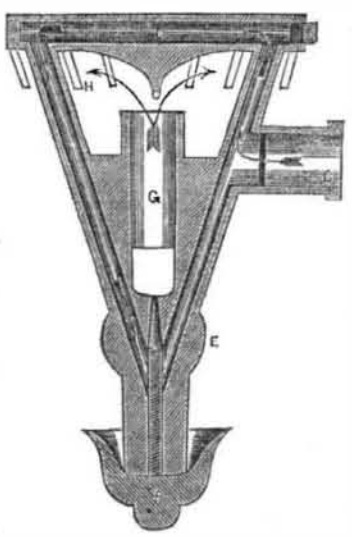
Fig. 1. Fig. 3. Fig. 2.



The name of "Spirit Gas Lamps," has become quite common. The liquid for illumination, is known by various names, but all more or less given for effect, ratherthan for any useful purpose. The lamps which we here present, are designed to burn the gas of the so-called "spirit-gas," which is a composition of alcohol and turpentine distilled together. No wick is burned, and only in the lamps figures 1 and 2 are wicks used, and in them only for capillary attraction.

The lamps represented in the said figures are both made and operated on the same principle, only in the one the interior is concealed by the pendants. The same letters refer to like parts. C is the reservoir of the fluid; D is a brass tube extending into the fluid, and it has a cap at the top, perforated all around. F is the flame ignition points of the gas, as it comes out of the perforations; E is the wick; the wick, by capillary attraction, carries up the fluid by heating the top of the tube,

Fig. 4.



D, until the fluid becomes gaseous, it then rushes out through the perforations, and is ignited in a state of inflammable gas, as represented at F. A great number of this kind of lamps are now used and manufactured in this city.

Figures 3 and 4, is another kind of lamp altogether. It does not use any wick at all. Nig. 3 is a front elevation of it, and fig. 4 is an enlarged section of one of the burners. A is the camphene reservoir, which can be filled at the top. B is a handle passing down the centre of the vessel and fitted to a conical valve at the bottom, where it joins the top of the central vertical tube, so that the flow from the reservoir may be cut off at pleasure. Two curved stems carry the burners, the construction of which is particularly represented in fig. 4. C on the right is the screwed attaching branch pipe. The camphene enters by this branch and passes through the diaphram as represented by the arrow, thence upward by a sloping arm into the top horizontal passage, D, which is formed on the surface of a circular disc surmounting the whole. It then descends by the opposite arm to the flattened boss, E, and rises through a small conical aperture in its centre. This aperture is fitted with a conical spindle, screwed at its lower end and in one piece with the cup, F, which answers as a nut for turning the spindle to adjust the size of the opening. The course of the gaseous matter is then directed through the central chimney, G, and is deflected by the inverted cone above it, and it then rushes out by a circular ring of eight, ten, or more jets, like those of figures 1 and 2. The burner is of brass, and the rest may be all cast in one piece, with the exception of the bottom cup. By unscrewing the cup, a wire can be introduced to remove any obstructions in the side tubes, but no obstructions are at all likely to get in them. In lighting this lamp, a few drops of alcohol is poured into the cup, F, and ignited, when the heat volatilizes the camphene in the passages of the burner, which can then be ignited, and the heat resulting from the ignition of the gases so produced, by acting upon the inverted cone at H, keeps up a continuous stream of gas. For suspension lamps, this one has no ordinary qualities to commend it. It no doubt requires attention, but the way in which it heats the fluid, and generates a very rarified gas, renders it capable of giving a very brilliant light.

The Chinese citizens of San Francisco, Cal. are mostly mechanics, and are the most temperate, peaceable and industrious inhabitants of that place. Sure we cannot call them heathen in rebuke, for they will rise up in judgement against professed christains.

Madame Arban, the wife of the celebrated aeronaut, whose melancholy fate is already known to our readers, has arrived at Madrid to fulfill an engagement entered into by her late husband previous to his last ascent, which resulted in his death.

Useful Receipts.

New Labor Saving Soap for Washing.

Dissolve ¼ lb. of lime in boiling water, straining twice through a flannel bag; dissolve separately ½ lb. of brown soap and ½ lb. of soda—boil the three together. Put six gallons of water into the boiler, and when boiling, add the mixture. The linens, which must be steeped in cold water for 12 hours, are wrung out, any stains rubbed with soap, and put into the boiler, where they must boil for thirty-five minutes. They are then drawn, (the liquor being preserved, as it can be used three times,) placed in a tub, and clear boiling water poured over it. Rub them out, rinse them well in cold water, and they are ready for drying. By this process two thirds of the ordinary labor of washing is saved; bleaching is dispensed with entirely; the clothes are much cleaner, and are less worn than by the ordinary mode of washing and the mixture no way damages the fabric.

The above is a good receipt for washing, so as to save soap, but it is severe upon the hands, being very liable to raise blisters upon them. The best thing to wash the hands with after washing, is a little warm vinegar.

To Cook Frozen Meat.

If frozen meat is brought into a warm room and thawed by heat—if you have not good teeth, and the digestive powers of an ostrich, you had best leave that part of the dinner for those who have. Therefore, bring from the larder, the night before it is wanted, the meat or poultry intended for dinner, and plunge it into cold water. The next morning, a thick coating of ice will be found encrusting the whole piece. Take it off, and change the water, and let it remain until the hour for dressing it. If to be boiled, put it over the fire in cold water—If for a roast put it not before too brisk a fire, as there is always danger that the heart of a large piece may not be completely thawed, in which case it will be spoiled.

Vegetables should be thawed in the same way, and they will be better for having been frozen with the exception of potatoes.

Quick Drying Body Copal Varnish for Coaches &c.

8lb. of the best African, Copal, two gallons of clarified oil, ½lb. of dried sugar of lead, 3½ gallons of turpentine. To be boiled till stringy, then another is to be made thus: 8lb. of fine gum anima, two gallons of clarified oil, ¼lb. of white copperas, 3½ gallons of turpentine. These to be boiled as the others, then the two are to be mixed and strained while hot. These two mixed together will dry in six hours in winter, and in four in summer; it is very useful for varnishing old work on dark colours, &c.

Best Body Copal Varnish for Coach Makers, &c.

This is intended for the body parts of coaches and other similiar vehicles, intending for polishing.

Fuse 8lbs. of fine African gum copal, and two gallons of clarified oil (old measure), boil it very slowly for four or five hours, until quite stringy, mix with three gallons and a half of turpentine; strain off and pour it into a cistern. If this is too slow in drying, coach-makers, painters and varnish-makers, have introduced to two pots of the preceeding varnish, one made as follows:—8lbs. of fine pale gum anima, two gallons of clarified oil, and three and a half gallons of turpentine, to be boiled four hours.

Composition of Friction Matches.

Chloride of potash 1½ oz., antimonium 1 oz., sulphur ¼ oz, and gum arabic and water sufficient to mix the compound and make it of the required consistence.