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## RAIL-ROAD NEWS.

### Arkansas—Internal Improvements.

We have received a pamphlet containing the address of a committee of gentlemen, of which Roswell Beebe, Esq., is chairman, appointed by the citizens of Little Rock, Arkansas, to take preparatory steps for the construction of a railroad from Little Rock to the Mississippi River. The address advocates the united efforts, mental and physical, of the people of the whole country, to open a central line of railroads through the heart of the State, connecting the whole of the State with the commerce of the "Mississippi," thence with the thoroughfares of the United States. The address is an able and exceedingly sensible one. It calls upon the people of Arkansas to go and look upon the wonders done in other States by railroads, and then to work with energy and build railroads in Arkansas. We hope the people of that State, so abundant in natural resources, will at once arise and build up a system of railroads—also a system of plank roads—and thus open up avenues for the transport of the natural products which wave in every valley, and are hid beneath every turf in that rich State. There is no State in our Union, not one, which would be more benefitted by a system of railroads than Arkansas. The people of Arkansas have applied to Congress for a grant of land to build the Arkansas Central Railroad.

### Railroads in California.

There is a considerable feeling excited in California about railways. It would be a great benefit to that country if a system of railways was laid. We see by the Alta Californian that the survey of the Pacific and Atlantic Railroad, from San Francisco to San Jose, had been completed, and Dr. Cobb was shortly to leave for New York, to raise funds for the enterprise. The project of building the road meets with good encouragement among those more immediately interested.

### Blue Ridge Mountain.

Col. Crozel, Engineer of the Blue Ridge Tunnel, contradicts the rumor that that important work had been discontinued on account of the hardness of the rock. "It is about a year since the tunnel was begun, and the perforation has been extended nearly 1,000 feet. Col. C. expects that the cars will be run through in a little over three years. The rock penetrated is mostly of a uniform hardness. But little trouble has been experienced from water, and there has been no necessity for ventilation. The perforation is 16 feet in width by 21 in height.

### To Make Good Indian Bread.

Beat two eggs very light, mix alternately with them one pint of sour milk, or buttermilk, and one pint of fine Indian meal, melt one table-spoonful of butter and add to the mixture, dissolve one table-spoonful of soda and saleratus, &c., in a small portion of milk, and add to the mixture the last thing; beat very hard and bake in a pan in a quick oven.

## DODGE'S NIGHT SIGNALS FOR SHIPS.

Figure 1.

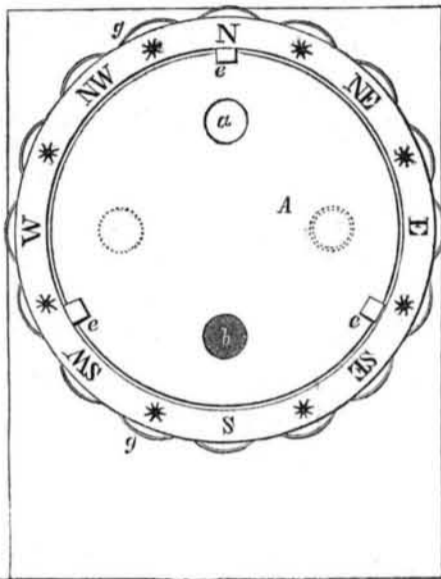
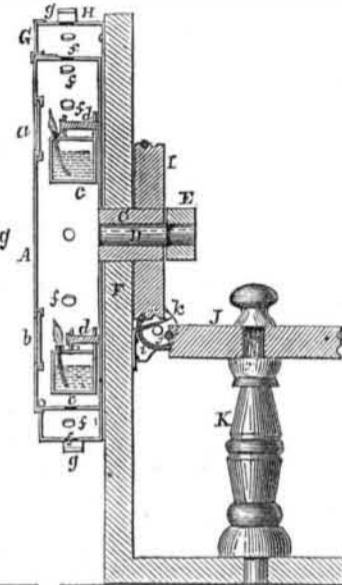


Figure 2.

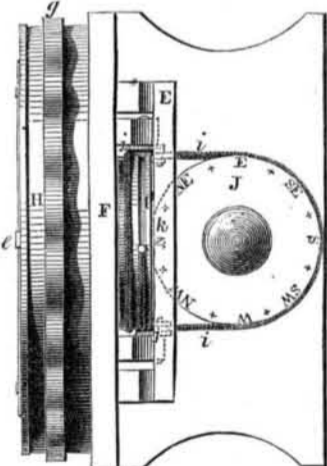


The accompanying engravings illustrate the night signals for steam and other sailing vessels, invented by Mr. Thomas H. Dodge, of Nashua, New Hampshire, and briefly noticed in our last number.

Fig. 1 is a front view; fig. 2 is a vertical section of the same taken through the centre at right angles to its face; fig. 3 is a plan view. The same letters of reference indicate like parts.

A is a revolving disc, forming the head of a drum. It has a hollow axle, C, fitted on a stationary one, D, which is secured in any convenient place in the vessel to make the disc face the head. The axle, D, is represented as secured in a rail, E, attached to the back of a board, F, which may be supposed to represent part of the wheel-house of a vessel. The revolving disc, A, has two circular holes, a and b, of equal size, but opposite one another, one of which is furnished with a white glass,

Fig. 3.



the other with a red glass. Behind these glasses, lamps, c c, are hung upon pins, d d, secured in the back of the drum. These lamps are so arranged that the lights are always opposite the glasses, a b, whatever may be the position of the drum; they always hang vertically. The disc is hinged to the drum and capable of opening for trimming and adjusting the lamps; e e, are fastenings to secure it. G is a ring with points of the compass graduated in it, (north being placed at the top) and forms part of a cylindrical casing, H, surrounding the drum, and secured to the board, F. The drum and cylindrical casing are perforated with holes, f f, to admit air to the lamps. The holes in the casing, H, are covered with slides of metal, g g, to protect them against the entrance of water. I is a band wheel secured to the hollow axle, C.

J is another band wheel fitted on the stationary axis, k, at the top of the standard, K, behind the board. The two band wheels are of equal diameter and their peripheries are connected around guide rollers, j j. When J is moved on its axis, it causes I to move the same distance. The top of J forms a table, which is graduated like a compass, and there is a stationary pointer, k, attached to the back of the board, F. The position of the two wheels bear such relation to each other, that when any particular point of the compass on the wheel, J, is opposite the stationary pointer, k, the white light points to the corresponding point on the compass which surrounds the revolving disc. The object of the wheel, J, is to set the lights from the deck in the proper position to indicate the course of the vessel when the lights are elevated above the deck. Whenever the course of the vessel is changed, the wheel is turned to bring the pointer on its table, which corresponds to the point to which the vessel is heading to the pointer, k; this brings the white light, a, opposite the corresponding point on ring G. The white pointer, k in fig. 3, indicates north, and in fig. 1 the white light is shown above the red or pointing to the north, this would show the vessel to be on a northward course. When the disc is turned to bring the red light to the right, and the white to the left, as shown by the dotted lines, fig. 1, the white points west and shows the vessel to be on a westward course. It is always to be understood that the white light is the pointer; any person familiar with the points of the compass on another vessel will be able to distinguish the vessel's course, though nothing but the lights may be visible. The red light may be stationary in the centre and the white may revolve around it; the application is the same, but the arrangement represented economises space, and enables lights to be placed at a greater distance apart on the same disc. The red light, as is well known, is seen at the greatest distance at night. This signal can also be used as one of distress by moving the white light from side to side above the red light. It could not fail to attract notice at a considerable distance. A different movement of the lights above or below, might be determined on to distinguish steam from mere sailing vessels.

We hope this signal will meet with the general attention which it deserves. It is our opinion that all vessels, and especially steamships, should be made to carry night signals; we also believe that they will do so at no great distance of time from the present moment.

More information about this invention may be obtained of the inventor (who has taken measures to secure a patent) by letter.

### Encke's Comet.

Encke's Comet was observed simultaneously at the Washington and Cambridge Observatories on Tuesday last. Lieut. Maury of the National Observatory, publishes a detail of the observations of Mr. Ferguson, with the filar micrometer of the large equatorial. Mr. W. C. Bond remarks, that nearly thirty years have elapsed since the period of revolution was ascertained to be about forty months or a little more than three years. Its recent returns have therefore been carefully observed by astronomers, as by them the truth of the theory of a resisting medium, proposed by Mr. Encke, will probably be ascertained. The Comet is coming towards the earth and we shall see more of it, if the clouds do not prevent. It is described as a faint white nebula, with a brilliancy capable of bearing only the faintest illumination.

### Sulphur Springs near Norfolk.

A sulphur spring, recently discovered on the farm of David Jordan, Esq., in Nansemond County, Va., fourteen miles from Norfolk, is said to have been pronounced by Professor Stewart, of Baltimore, to whom the test was confided, to be probably one of the most efficient and valuable medicinal waters in the world. It combines the property of the Saratoga with that of the White Sulphur waters, and may be said to represent perfectly the water of the far famed Harrowgate Spring.

### New Telegraph.

A system of nautical telegraphs has just been tried at Nantes, with satisfactory results. The basis of this system, which was invented by the captain of the port of Dunkirk, consists in having 72 signals made by means of objects always at hand on board every ship. Thus, by means of a napkin, a ball of tow, a basket, and a hat, several important orders were given at Nantes.—[Ex.

[This is not a very extraordinary affair. All nautical telegraphs are made out of things always on hand on board of every ship.

### To Prepare a Varnish for Coating Metals.

Digest one part of bruised copal in two parts of absolute alcohol; but as this varnish dries too quickly, it is preferable to take one part of copal, one part of oil of rosemary, and two to three parts of absolute alcohol. This gives a clear varnish, as limped as water. It should be applied hot, and when dry, it will be found very hard and durable.

### To Prepare a Varnish for the Scales of Thermometers.

One part of copal, one part of oil of rosemary, and three parts of oil of turpentine, recently rectified or digested with sulphur.—After a moderate digestion, the varnish is ready for use. This varnish dries quick, but is not so hard as the preceding, although it resists the action of the air and atmospheric influences.

### For Varnishing Leather.

Six parts of oil of turpentine, saturated with india rubber, two parts of oil of rosemary. This varnish should be applied somewhat fluid, and always dried at a high temperature.

### Frazier's Excavator.

Mr. Frazier, an engraving of whose excavator we published in number 17, writes us, that with a four horse-power engine, it will excavate from four to five hundred yards per day of mud or earth, and with a ten horse-power engine, it will take out from nine hundred to one thousand yards. It can excavate to the depth of fifteen feet below the surface. It is an improvement which will soon commend itself to the public.